Building Community Resilience to Emergencies in Vulnerable Populations

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RAMSEY COUNTY

Resilient Communities Project
University of Minnesota
Building community-university partnerships for sustainability

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The contents of this report represent the views of the authors, and do not necessarily reflect those of RCP, CURA, the Regents of the University of Minnesota, or Ramsey County.

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Building Community Resilience to Emergencies in Vulnerable Populations: A Human Centered Approach to Community Outreach and Engagement

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Abstract

Ramsey County Department of Emergency Management and Homeland Security (RCEMHS) has a knowledge gap in vital information about preparing for, responding to, and recovering from disasters in vulnerable communities. This study focused on three key vulnerable communities within Ramsey County: older adults (60 years or older), children under five, and the Karen population. Qualitative analysis of interviews was conducted with individuals, organizations, and government departments within Ramsey County. Due to the trans-boundary and trans-jurisdictional nature of natural and human-caused disasters, coordination within agencies and with nonprofit and private organizations is necessary. The study found that many vulnerable populations interact with public benefit programs, providing insight into disaster resilience. These touch-points can be trust and resilience-building exchanges. The communities have a lack of knowledge of RCEMHS and emergency management, and which may reinforce complacency towards emergency preparedness. To counter a lack of knowledge and engagement in emergency preparedness by communities, we recommend RCEMHS adopt a human centered approach in preparation and planning activities, where communities hold valuable expertise about their assets and vulnerabilities in regard to disasters. This study developed five recommendations for more effective outreach and engagement in emergency management. Each of the recommendations can use human centered design strategies and are aligned within a community resilience framework.

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Introduction

At the center of disasters are communities dealing with the aftermath and not all communities feel the impact of disasters equally. Disaster preparedness knowledge is an important factor in successful recovery efforts. As the most densely populated and one of the most diverse counties in Minnesota, it is important for Ramsey County to engage effectively with all its communities to ensure that every resident is well prepared for natural and man-made disasters. Given the density and diversity, however, not all communities are being reached effectively. These gaps exist in part because disaster preparedness research is lacking for many of the county's vulnerable communities. Too little is known of what assets and social vulnerabilities exist within certain demographic groups in Ramsey County to help them prepare for and respond to natural and man-made disasters

To encourage and support community resilience to disasters across the county, Ramsey County Emergency Management and Homeland Security (RCEMHS) needs to identify the social vulnerabilities and assets that exist within each community. Our primary recommendation for RCEMHS is to use a human centered approach to identify vulnerabilities and assets. This approach will keep the needs of vulnerable communities, of whom are most impacted by disasters, at the center of its outreach. How communities prepare for and respond to disasters vary depending on which social vulnerabilities are present in the community. Vulnerabilities such as socioeconomic status of its members, housing, access to transportation and language; and assets including social networks all affect a community's disaster preparedness and response.

The mission of RCEMHS is to foster resilience in Ramsey County through the development of a community-wide culture of preparedness and the coordination of public safety efforts to prevent, plan for, respond to, mitigate and recover from all hazards, disasters and emergencies – whether natural or human-caused, accidental or intentional (Emergency Management & Homeland Security, 2019). RCEMHS is responsible for the development and maintenance of the Ramsey County Emergency Operations Plan (RCEOP). The RCEOP provides the framework by which Ramsey County and its communities manage major emergencies that threaten health, safety, property and resource (Emergency Management & Homeland Security, 2019). Within the RCEOP, Ramsey County identifies not only the importance of responding to communities' needs when a disaster occurs but also recognizes there are critical actions that need to take place for communities to build resilience prior to disasters.

Specific to Ramsey County, the core elements of this project will: (1) identify key social vulnerability indicators to inform the development of a social vulnerability index (2) determine assets and vulnerabilities for three demographic groups: older adults 60+, children under 5 years old, and the Karen community; (3) provide recommendations on community partnerships and models of how to engage with vulnerable communities to better improve emergency plan outreach and (4) provide recommendations for how to approach collaboration and management of County departments when engaging with vulnerable communities in regards to disaster preparedness and response.

Research Questions

Based on the four core elements of the project, the following research questions were developed:

1. *What assets and social vulnerabilities could inform Ramsey County emergency response to natural and man-made disasters?*

2. *What factors influence how communities build resilience and respond to natural and man-made disasters?*

3. *How have local governments effectively cross collaborated to build resilient communities and serve communities in times of disaster and recovery?*

4. *What outreach strategies are effective in reaching vulnerable communities?*

Background

Ramsey County's emergency and disaster management is laid out in the Ramsey County Emergency Operations Plan. The plan explains the common doctrine and structures used to coordinate activity across the various levels of government and provides information on how the county will manage emergencies that threaten county functions and services as well as efforts undertaken by each of the municipalities (*Ramsey County Emergency Operations Plan*, 2017). Disaster management refers to the relationship hazards and vulnerabilities have on the risk of a disaster, where risk increased with the magnitude of the hazard, amount of vulnerability, and resource scarcity (Flanagan et al, 2011). Generally, and for the scope of this project, a disaster is a natural or anthropogenic disaster. Disaster response, emergency management, and preparation have historically focused on the vulnerability of physical assets, like infrastructure (Flanagan et al, 2011). Using a community resilience framework emergency management moves from focusing exclusively on physical vulnerability to recognizing physical and social assets within communities. Using a community resilience framework helps emergency management to understand the social vulnerabilities, resiliency, and assets in a community, which enables precise resource allocation and outreach in preparation for, or response to, a disaster (Flanagan et al, 2011).

A social vulnerability refers to a community's resilience in response to external stress ("CDC's Social Vulnerability Index," 2018). A more intimate understanding of community vulnerabilities and assets provides an opportunity for building resiliency in such communities (Flanagan et al, 2011). This applied study of vulnerability provides insight into influences of vulnerability and resiliency in communities over time (Rygel, O'sullivan, & Yarnal, 2006).

The definition of community can vary greatly, referring to geographic location, membership, or a cultural group. For this project, community is defined as belonging to a specific group as defined by age or ethnicity. A vulnerable community will typically have fewer resources for preparation and mitigation (Rygel, O'Sullivan, & Yarnal, 2006), be more reliant on outside resources, less likely to receive outside resources during response, slower to recover, and more likely to have members of the community die (Flanagan et al, 2011).

The overall goal of RCEMHS emergency planning is to increase the resilience of

communities (*Ramsey County Emergency Operations Plan*, 2017). The concept of resilience has evolved in psychology and behavioral health as a means to understand what adaptive capacities allows some individuals to continue functioning effectively and display positive outcomes in the face of adversity (Plough et al, 2013). A supportive social context in a community prior to a disaster has emerged as a key component for resilience to move from being defined at the individual level to a community definition of resilience (Plough et al, 2013). Community resilience creates a whole that is greater than the sum of its parts, meaning a collection of resilient individuals does not guarantee a resilient community (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008).

Cutter et al (2013) defines community resilience as the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events. Resilience is a process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008). Resilience includes inherent conditions that allow the system to absorb impacts, cope with an event as well as post-event and adaptive processes that facilitate the ability of the system to re-organize, change and learn in response (Cutter et al, 2013). According to Manyena (2006) "viewing disaster resilience as a process (leading to desired outcomes) ... places emphasis on the human role in disasters. Disaster resilience is seen as a quality, characteristic or result that is generated or developed by the processes that foster or promote it." Resilience is a process linking resources to an outcome.

While there is a general consensus on the definition of community resilience, there is less of an understanding on how to build resilient communities. In research conducted by Nuwayhid et al, collective identity, previous experience with adverse events, and social support networks contribute to building resilience. Community cohesiveness, social solidarity, and connected political leadership help to sustain resilience after an event (Plough et al, 2013). Building resilience has a participatory component based on who/where resilience is being built (Cutter et al, 2013). Responsibility for building and influencing community resilience is shared by individuals, families, government agencies, nonprofits, faith-based organizations, and all levels of government (Cutter et al, 2013). RCEMHS accounts for community resilience as a mitigation activity (*Ramsey County Emergency Operations Plan*, 2017).

Inherent in resilient communities are principles of equity and social justice. The impact of a disaster on a community is determined by everyday patterns of social interaction and organization particularly by stratification paradigms which determine access to resources (Morrow, 1999). Communities with strong social and economic infrastructures have health insurance, stable housing, and other assets that make them better able to be resilient socially and economically than marginalized communities (Plough et al, 2013). The effect of a disaster on a household or community, therefore, results from a complex set of interacting conditions related to geography and location and social and economic characteristics of the people living there (Morrow, 1999).

Problem Description

RCEMHS seeks to understand social vulnerabilities and assets within the county to better prepare for, respond to, and build resilience against natural or human-caused disasters" ("RC 1 Building Community Resilience to Emergencies n Vulnerable Populations," 2019). Pre-existing patterns of communities are increasingly recognized as the root of disaster vulnerability (Morrow, 1999). The impact of a disaster on a community is not random but determined by

everyday patterns of social interaction and organization related to socioeconomic status and access to resources (Morrow, 1999). Effective disaster response at the local level must include a comprehensive understanding of the patterns and social interactions within particular communities (Morrow, 1999).

Risk to disasters can be identified and aggregated into indicators. Such indicators include:

- (A) Limited economic and material resources. Households living in poverty have fewer financial resources to plan for a disaster and recover more slowly after a disaster takes place. Economic status is also often connected to poorly built housing or inadequately maintained housing. People living in poverty also may have less access to transportation to evacuate prior or to assist in connecting to relief efforts post disaster (Morrow, 1999).
- (B) Human or personal resources including physical ability, relevant experience, education and skills (Morrow, 1999). For example, the vulnerability of people of the age of 65 varies greatly based on their age and health status and on the other end of the spectrum, children have increased vulnerability based on age and their physical and emotional development.
- (C) Family and social resources including the extent to which households are embedded in larger social networks. Recent immigrant communities may be more vulnerable because they lack connections to the larger community and may hesitate to ask for government help (Morrow, 1999).
- (D) Membership in racial or ethnic communities results in social and economic marginality influencing the impact of a disaster and one's ability to recover. Minority groups are often not included in disaster planning and there are cultural differences with how people assess and respond to hazard risk (Morrow, 1999).

Overlap among indicators can also create a compounding effect, which places communities and at an even greater risk of vulnerability to a disaster. Understanding the composition of the county along with vulnerabilities and assets is critical to communicating with and serving communities to prevent residents from being disproportionately affected by a disaster in mitigation, response or recovery.

It is also important to place this project and community resilience in the context of Ramsey County's 2018 Strategic Plan. Priorities including inclusive, effective and meaningful community engagement, advancing racial and health equity in all decision-making, effective and efficient services that put residents first, enhanced data sharing and integration, access to service delivery and facilities, and comprehensive economic development to build prosperity (Ramsey County Strategic Plan, 2018) have the capacity to build community resilience in the county. It is beneficial for emergency management to reflect where their work with building resilience intersects with the priorities in the strategic plan, as work across departments could be leveraged for emergency management.

The question of how to build resilience in vulnerable populations is coming at a critical juncture for Ramsey County. Indicators correlated to disaster vulnerability are present within communities in Ramsey County and disaster magnitude and frequency will likely be exacerbated by climate change. The aging population is growing, there is an increasingly diverse population, and there are deep racial and economic disparities. Older adults, children under 5 years old, and the Karen community were included in this study based on the priorities of RCEMHS with consensus by the capstone team. These three communities exhibit the indicators outlined above to varying degrees. Different disciplines define and measure vulnerability differently (Alwang,

Siegel, & Jorgensen, 2001), meaning any given vulnerability indicator may not be appropriate for the communities in Ramsey County (Rygel, O'sullivan, & Yarnal, 2006). To address this variability, the Resilient Communities Project will: identify indicators of vulnerability and resiliency specific to the communities of Ramsey County; use these indicators to develop outreach methods appropriate for Ramsey County; and use the project data to inform recommendations related to outreach. Focusing on three communities, which represent both common and perhaps vulnerabilities specific to them, will serve as a starting point for Emergency Management to better understand and develop models and recommendations which can be applied to other vulnerable communities.

Methodology

Three main research activities were conducted for this project, including a literature review, interviews, and qualitative analysis. First, a literature review of emergency management, resilience, and effective outreach models was conducted. Second, interviews with government agencies, nonprofit organizations, and community leaders were carried out. Third, using the literature review as a framework, the interviews were analyzed to find main themes within and across the three communities of focus: older adults 60+, children under 5 years old, and the Karen community.

Literature Review

The cross-jurisdictional nature of emergency management and disasters prompted a literature review on framework surrounding inter- and intra-agency collaboration and community engagement. This research provided a baseline knowledge of decision-making structures, network structures, case studies on the successful facilitation of collaborations with other public, private, and nonprofit organizations, and involvement of the community in decision-making processes. Peer-reviewed articles, case studies from other counties, and secondary literature from government agencies and nonprofits were used to inform the literature review and frame qualitative analysis. The RCEMHS team provided several academic articles on disaster preparedness and resilience that informed the research. For the peer-reviewed articles, we conducted an e-search of academic journals pertaining to resilience, vulnerability, disaster preparedness, emergency management, outreach, and government partnerships within the three demographic groups the project is focused.

Interviews

There is a significant amount of information available on this topic at the international, national, state, and regional level. The concern, however, is the lack of information available that could be directly applicable to local municipalities within Ramsey County. We used a case study approach in an effort to provide a narrative applicable to the experiences of communities in the county. Because the project's research questions were focused on qualitative data, interviews were conducted to find similar themes across the three groups.

Data Collection

In total, 46 agencies, organizations, and individuals were contacted, and 21 interviews were conducted. Interview questions were written to answer the four research questions. Three sets of interview questions were developed for individuals, nonprofit organizations, and government agencies. A matrix was then created to determine if the interview questions would inform the research questions. The client also reviewed the questions to ensure objectives were being met. See Appendix A for interview protocol and questions.

An initial database of organizations in Ramsey County was developed and RCEMHS provided connections with several organizations through email. Emails were sent out based on research of relevant organizations and agencies. RCEMHS did not have contacts with organizations that served the Karen community, but an initial Google search yielded leads that were used as launching points. Internet searches were also an initial starting point for families with children under 5. The goal from these comprehensive searches was to get a mixture of government and nonprofit organizations that served the project's targeted demographic groups.

Snowball sampling method was utilized to expand the research network by asking each initial interviewee if there was anyone else they recommended for an interview. This method allowed for the ease of procuring additional interviews and expanding the network of the research. For the Karen community, it helped to have a Karen "guide" to refer and connect to other potential interviewees. Additional methods of connecting with community organizations included researching websites and utilizing the available contact information or making a direct-reach through LinkedIn.

Analysis

NVivo, a qualitative analysis software was used to code each interview and determine the main themes from each group and overlapping themes across groups. We used a list of predetermined general codes to organize the interviews and created sub-codes during the analysis process. General codes included assets, barriers, emergency planning, engagement, government, outreach, partnerships, resilience, technology, volunteers, and vulnerability.

Limitations

The restricted timeline available to complete research was a limitation for the project. Given the limited time-period, the interview pool was only a subset of nonprofit organizations and government agencies that serve each demographic group. Researching appropriate organizations, contacting and scheduling an interview took anywhere from several days to two weeks. Because of the limited time, we engaged in snowball sampling by asking each interviewee to provide recommendations for future interviews. This reduced time looking for interviewees but biased the sample. Due to these limitations, the interview group is not a representative sample of each demographic population.

Another limitation to the research is the overall complexity of emergency management. With the large amount of research on the topic, it was a challenge to get a completely comprehensive and in-depth understanding in the limited time. There was also hesitancy from interviewees due to the "obscure" nature of the topic. Many contacts were reluctant to be interviewed due to feeling unqualified to speak on emergency management.

Emergency Management Models of Collaboration

Inter-Agency and Intra-Agency Partnerships

Disasters require varying degrees of response, depending on the scale and magnitude of the impact. Coordinated response efforts under times of stress, and preparatory resilience building takes place in communities where formal and informal networks are a part of daily decision-making. Response from multiple actors, either within the same agency, other government agencies, or nonprofits should be leveraged in such a manner that address community needs during vulnerable times. Structural organization, decision-making strategies, and network mapping provide insight into inter and intra-agency collaboration as it applies to disaster and emergency management.

In disasters, risk is shared between agencies and organizations because of perceived shared threat, which results in a shared response to the stressful event (Kapucu, 2006). Disasters of such scale, or transboundary disasters, engage stakeholders and resources from across jurisdictions and exceed the capacity of a single organization to respond (Nowell, Steelman, Velez, & Yang, 2017; Steigenberger, 2016). Disasters are characterized by complexity, dynamic conditions, unpredictability, and distributed information across jurisdictions (Nowell, Steelman, Velez, & Yang, 2017). This gives rationale for inter and intra-organizational response planning, in addition to developing social capital and networks that serve as assets and resilience-building factors. Despite the networked nature of disaster response, Incident Command System (ICS) coordinates response in disasters, which is a command and control tool discussed further in later sections (Nowell, Steelman, Velez, & Yang, 2017).

The complexity of disasters and their impact on communities necessitates response from a diversity of organizations and collaboration between them (Kapucu, 2006). Partnerships between organizations can be defined as two or more organizations contributing resources to a shared initiative or common goal (Kapucu, 2006). Successful partnerships often necessitate complementary resources (Kapucu, 2006). Large-scale disasters that cross jurisdictions require flexibility, distributed communication, ability to coordinate bilaterally, and acting as a collective unit (Nowell, Steelman, Velez, & Yang, 2017).

RCEMHS has identified the importance of partnerships and collaborative response through their guiding principles: engaged partnerships, tiered response, scalable, flexible, and adaptational capabilities, unity of effort through unified command, and readiness to act (*Ramsey County Emergency Operations Plan*, 2017). The Ramsey County Emergency Operations Plan further articulates the role of partnerships in community resilience in their response strategy: "Resilient communities begin with prepared individuals and depend on the leadership and engagement of local government, county government, NGO's, and the private sector" (*Ramsey County Emergency Operations Plan*, 2017).

Intra-agency Partnerships

Relationship building among different agencies and departments within an entity or organization is a pre-disaster act that strengthens the efficacy of a response following a disaster, due to improved operational success (Kapucu, 2008). Pre-disaster communication between

agencies and organizations has been proven to drive effective mitigation, preparation, and response (Kapucu, 2008). Emergency management workers are routinely filtering whether information seems crucial or distracting, which is subjective and complicated (Bharosa, Lee, & Janssen, 2010); however, coordination across departments enhances disaster response in a number of ways. A responding agency may better allocate resources with stronger internal relationships, as departments will be aware of efforts beyond their field (Janssen, Lee, Bharosa, & Cresswell, 2010).

Graphical depictions establishing a general structure of a network can help others understand the network within an agency, or across agencies (Nowell, Steelman, Velez, & Yang, 2017). This analysis exposes excluded networks, gaps, or redundancy in the network of study. In addition, the exercise is able to expose the central actor in a response and who "key brokers" are. Key brokers connect to and disseminate information to actors not embedded in the network of the responding agency (Nowell, Steelman, Velez, & Yang, 2017). The benefits of stronger internal relationships and understandings translate to organizations outside of the responding organization, in public-private and other partnerships discussed later in this paper.

Coordination issues and challenges that hinder interagency collaboration and response to a disaster can result from a lack of leadership, stemming from factors like burnout or lack of experience (Steigenberger, 2016). Intentional staffing and training as a means of planning for a disaster can prevent ambiguity in roles and structures in a high-stress environment (Steigenberger, 2016). Coordination and response in an urban environment may benefit from a more centralized command structure with specialized outreach or key brokers, as discussed in the core-periphery model in the section below (Steigenberger, 2016). While having a complete plan for all disaster is difficult, having strengthened core functions of coordination, like communication, information sharing, and cultural competency, eliminate the likelihood of high-frequency errors in the response process (Steigenberger, 2016). Such training for disasters provides various utility. These exercises network interagency individuals and departments and encourages learning across the organization (Steigenberger, 2016).

Standardization of information sharing addresses issues within the agency. Individuals and departments may intake and prioritize information differently, for example: immediate task versus information processing (Bharosa, Lee, & Janssen, 2010). These differences in communication prevent information sharing due to differences in priority and understanding. To encourage information sharing and communication across departments, and ultimately agencies, "emotional rewards and acknowledgement of their credit" are methods to increase systems thinking and ultimately information sharing (Bharosa, Lee, & Janssen, 2010). These and the following insights on inter and intra-agency collaborations serve to inform effective partnerships, outreach, and resilience-building in the community, as identified in the research questions.

ICS and Core-Periphery

Incident command system (ICS) is the standard response procedure to disasters which has explicit chain-of-command, hierarchical structure, see Figure 1 (Nowell, Steelman, Velez, & Yang, 2017). Ramsey County Emergency Management's guiding principles include "unity of effort through unified command," which is the decision-making basis for the entire disaster cycle (Ramsey County Emergency Operations Plan, 2017). Literature has supported and criticized this setup, with apparent tradeoffs structure has been shown to be too rigid amid disasters, particularly when coordination across jurisdictions and networks are necessary (Nowell,

Steelman, Velez, & Yang, 2017). In addition, specific perspectives may be unintentionally excluded through a single actor leading a response (Kapucu, 2008). However, this system integrates and streamlines "facilities, equipment, personnel, procedures, and communications" and is considered critical to emergency response ("Incident Command System Resources FEMA.gov," 2018).

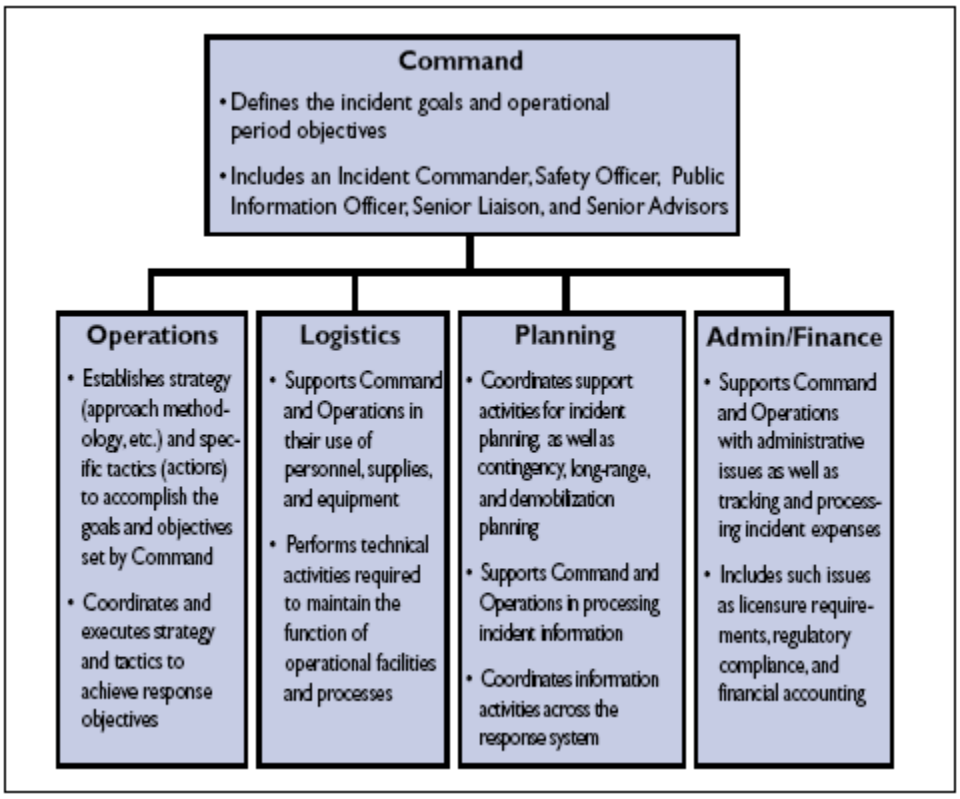

Figure : ICS Structure

A modified but appropriate network model for emergency management has been described as a "core-periphery" where several central stakeholders that are strongly networked act as brokers (Nowell, Steelman, Velez, & Yang, 2017). The periphery, connected to the core by the brokers, act functionally to the response. This structure has been more flexible to the changing dynamic of disasters while maintaining information flows and resiliency (Nowell, Steelman, Velez, & Yang, 2017). The core-periphery structure accomplished conflicting needs in a disaster: centralized coordination and networking of outside organizations (Nowell, Steelman, Velez, & Yang, 2017). Figure 2 compares the different network structures (Nowell, Steelman, Velez, & Yang, 2017).

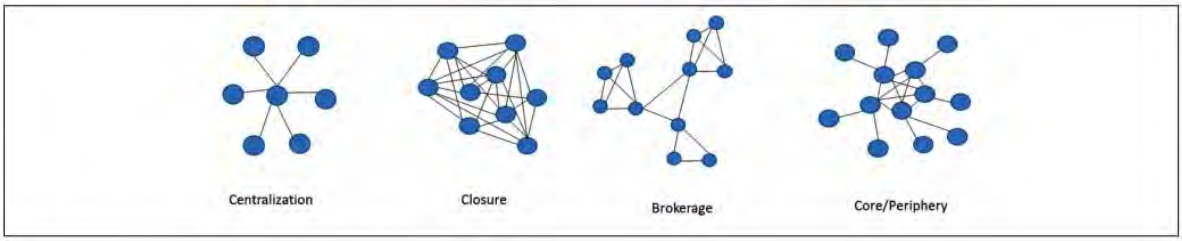

Figure 2: Network structures, including ICS (centralization) and Core/periphery

The makeup of the core, periphery, and brokers are determinative of coordination amid a disaster. The periphery efficacy is based on a network of functional, operational groups outside of the core (Nowell, Steelman, Velez, & Yang, 2017). A successful broker likely looks like an individual with an operational role and are embedded in the local network, like a sheriff. The capacity of a broker determines information flow (Nowell, Steelman, Velez, & Yang, 2017). Additionally, characteristics of the individuals impact functionality. Local networks are informative when outside management responds to a disaster while heterogeneity and size of core members need to increase as the disaster scale increases (Nowell, Steelman, Velez, & Yang, 2017).

Public-Nonprofit Partnerships (PNPs)

PNPs have a place in addressing societal problems through their ability to connect various networks, organizations, and resources (Kapucu, 2006). Many such partnerships rely on self-selection and are voluntary in nature, making resources and success dependent on the participants (Kapucu, 2006). PNPs have been shown to engage community members in decisions that concern their ways of life while contributing to priority setting (Kapucu, 2006). Such partnerships distribute decision-making horizontally, which has been shown to develop social capital and inclusivity, which is a strategic goal of Ramsey County (Kapucu, 2006). Social capital, in particular, trust and tight networks, build resilience in communities and enable them to better respond to disasters (Kapucu, 2006).

Mistrust in government institutions has historical factors, including scandals and failures to constituents (Youngblood & Youngblood, 2018). Specific to government involvement in emergency management, failures resulting before, during, and after Hurricane Katrina have eroded constituent response to government (Youngblood & Youngblood, 2018). Building of trust through PNPs enables more effective communication and strategy implementation in a disaster, but this work is most effective when done prior to a disaster or stressful situation (Kapucu, 2006). While these partnerships and relationships build trust and communication, independent information systems between organizations and agencies can isolate opportunities for communication (Janssen, Lee, Bharosa, & Cresswell, 2010).

Enterprise architecture (EA) aggregates information systems and communication into a streamlined platform that can be understood across organizations, though this requires a level of broadness and preparatory planning (Janssen, Lee, Bharosa, & Cresswell, 2010). Multiple systems have been created and utilized during trainings and demonstrations to share information across agencies. This technology can share information such as location, email, navigation, photos, assignments and roles, and more (Bharosa, Lee, & Janssen, 2010). While technology can

mitigate technological barriers in information sharing across organizations, value-judgments in communicating information result in critical gaps. Preventing centralized information flows may mitigate this, which promotes structures like the core-periphery discussed previously (Bharosa, Lee, & Janssen, 2010).

Nonprofit organizations often serve their communities and as such are embedded in the informal networks that exist among residents. These networks and relationships serve an important purpose in emergency preparedness and disaster response. Social capital and networks facilitate individual and organization response in disasters in several ways: by increasing interaction, communication, trust, reciprocity, dissemination of information, and resource access (Kapucu, 2006).

Following the disaster that unfolded in New York City on 9/11, the New York Mayor's Voluntary Action (MVAC) served as a coordinator to the responding nonprofit organizations (Kapucu, 2006). Key response coordination activities included information aggregation about responding organizations, leader identification, information session hosting, and volunteer referring (Kapucu, 2006). Another example of response from 9/11 came in the founding of "11 September fund" used network power to meet the needs of the community. The fund assessed needs through listening to nonprofit organizations.

Social capital built through PNPs enables community engagement in decisions that concern them and may increase participation in programs or make programs more fit to the community (Kapucu, 2006), this being a horizontal decision-making strategy. These activities build capacity and resilience within the community resulting in more effective decision making, program and project implementation, and community commitment.

Public-Private Partnerships (PPP)

Private organizations and businesses have been an integral part of disaster response, where they have provided resources, volunteers, capital, and more. The Federal Emergency Management Agency (FEMA) has emphasized the importance of public-private partnerships themselves, indicating this trend will continue to improve the efficiency and efficacy of responses to disasters (Busch & Givens, 2013). PPPs are an effective way of allocating resources to those in disasters and positively impact the economy through business following a disaster (Busch & Givens, 2013).

These partnerships impact disaster management on all organizational levels of Integrated Planning Security (IPS) (Busch & Givens, 2013). As a result, this means activities can be performed or delegated outside of the government, especially when such tasks are negotiated prior to the event of a disaster (Busch & Givens, 2013). This strategy reduces decisions being made during an actual disaster (Busch & Givens, 2013).

There often is a lack of incentive to share information and communicate outside of an organization, even though stronger inter-organizational networks are better equipped to mitigate, prepare for and respond to disasters. Private organizations hesitate to share proprietary or sensitive information, and public agencies often underestimate the engagement of private businesses (*Public-Private Partnerships for Emergency Preparedness: Developing Partnerships*, 2014). A focus on social and cultural norms within an agency are an effective route in mitigating this. Encouraging norms and values of information sharing increases dissemination and reach of communications (Bharosa, Lee, & Janssen, 2010).

Best practices in developing public-private partnerships follow the preparatory and mitigation flows of the disaster cycle. Similar to other partnerships, identification of purpose, objectives, and appropriate partners represent appropriate first steps in this process (*Public-Private Partnerships for Emergency Preparedness: Developing Partnerships*, 2014). Engagement of the organization, third-party involvement, and continued joint activities are critical in maintaining the network and relationship. FEMA has developed a framework and foundational core attributes around public-private partnerships in recognition of the importance of this form of networking (FEMA, 2013). Community Emergency Response Teams (CERTs) have been structured as public-private partnerships in major urban areas like Dallas, TX (*Emergency Management Partnership Examples*, n.d.).

Fairfax County, Virginia, has utilized public-private partnerships in order to "prepare for, effectively respond to and quickly recover from emergency events" ("Fairfax County | Emergency Management," n.d.). This county has an Office of Public Private Partnerships (OP3) with the purpose of encouraging innovation and civic involvement and responsibility ("Public Private Partnerships | Fairfax County," n.d.)

Interview Analysis

Qualitative analysis of interviews indicated intra and inter-agency collaborations with RCEMHS support specific initiatives, like training. The county interacts with organizations and individuals very frequently, and these touchpoints have been identified as collaborative or engagement opportunities. A strong intra-agency relationship highlighted was Ramsey County Public Health/RCEMHS. A factor that strengthened this collaboration was a grant guiding the response to events that have a human impact. Internal to Ramsey County, partnerships have typically been initiated or managed through executive leadership teams, with a number of partnerships existing within a leadership team, like Health and Wellness. Other departments within Ramsey County have relationships and information on the communities that can inform what assets and social vulnerabilities RCEMHS is working with. Trusting other departments was discussed as a critical point, especially when time and resources are limited. Organizations outside of Ramsey County indicated their most frequent interaction and partnership with RCEMHS were in the form of drills, training, and exercises that are intended to be preparatory.

Identified barriers to stronger internal partnerships include time restraints, resources, relationships, language, information sharing, and organizational structure. Referring resources and working on multidisciplinary projects requires that departments are aware of each other's initiatives and resources. When a relationship exists across departments, staff indicated that collaborations are more thoughtful and frequent. Information sharing may be limited by legal forces, like the Health Insurance and Portability and Accountability Act (HIPAA), and ensuring that information being shared does not need to go through a vetting process.

Summary

Strong partnerships build community resilience, strengthen coordination related to emergency management, and connect resources to those who need them in the community. Nonprofit and private organizations are networked into the communities they serve and work with, making them a valuable broker of resources and information to RCEMHS. These activities

increase interaction between the community and the government, in turn building social capital which is a key determinant of community resilience and how communities fare during disasters and emergencies. Interviews indicated that Ramsey County departments have a host of touchpoints with organizations and individuals in the community, which should be leveraged as partnerships. Interviewees mentioned collaboration on events and activities as a method of increasing RCEMHS awareness and reach, by intentionally co-hosting or sponsoring an event. Ramsey County staff discussed a monitoring process of existing organizations serving Ramsey County residents, which would serve as a database for potential partnerships while revealing existing gaps and redundancy. Such network mapping can be done in a visual way to reveal key community leaders, who should, in turn, be central to emergency management. Partnerships provide an opportunity to build relationships as a pre-disaster activity, delegate efforts throughout the disaster cycle, and reduce the frequency of errors and decisions that happen during an emergency.

Community-Based Engagement

Ramsey County's first priority in the 2018 Strategic Plan was "Inclusive, Effective and Meaningful Community Engagement" (Ramsey County Strategic Plan 2018, 2018). In a top-down, command and control approach to disaster management, the authority makes decisions based on their perception of the needs. In this model, communities are viewed as victims or receivers of aid (Pandey & Okazaki, 2012). As an alternative, community engagement can be a strategy for disaster prevention and mitigation activities, though it affects all stages of disaster cycle. Community engagement is a process that includes multiple techniques to promote the participation of residents in community life. Particularly those who are excluded or isolated by engaging them in collective action to create a healthy community (Nexus Community Partners, 2018). Using a community engagement model, communities are supported in analyzing their own hazardous conditions, vulnerabilities, and capacities as they see themselves (Pandey & Okazaki, 2012). During a disaster, people at the community level have more to lose because they are directly affected by the disaster and on the flipside, have the most to gain if they can reduce the impact of disasters in their community (Pandey & Okazaki, 2012).

Research has supported the notion that community engagement and coordination during non-disaster times improve the outcomes a community can expect to have in the event of a disaster (Kapucu, 2008). Community engagement in non-emergency times reinforces relationships between the community and government, which improves relationships, coordination, and empowers community members and organizations (Kapucu, 2008). During a disaster, community organizations and community members need to receive and relay information and resources. Engagement facilitates buy-in for planning activities, like response to warnings and evacuation plans (Kapucu, 2008).

A genuine concern and vulnerability in disaster planning is public complacency towards preparedness (Kapucu, 2008). Following spans of inactivity in terms of a disaster, communities have a tendency to minimize the risks and hazards presented (Kapucu, 2008). Lack of engagement in preparation and mitigation processes can result in increased devastation, disrupted communication channels, and underestimation of threats (Kapucu, 2008). However, the need for actively engaged community members and participation has direct and relevant consequences to the outcomes of the disaster and the efficacy of the responding agencies. When communities are prepared, engaged with or in relationship with the responding organizations, and facilitating

communication channels, resources are allocated to those who most need them, which reduces overall demands of responders and resource suppliers (Kapucu, 2008). Pre-disaster activities that inform constituents of hazards and action items have been implemented by emergency response personnel in the form of meetings, exercises, practice responses, and communications (Kapucu, 2008. Engagement with the community founded in school-systems has been identified as a strategy for wide-spread community information dissemination and preparedness, as it becomes "second nature" to children and their families (Kapucu, 2008). This strategy serves as an effective outreach method, collaborative effort, and capacity building activity that builds community resilience.

In addition to the emphasis of preparedness and disaster training effects that are purported to take place when training children, having an active Community Emergency Response Team (CERT) in each community builds resilience and preparedness (Kapucu, 2008). These organizations facilitate the development of social capital, activities surrounding preparedness, and perpetuate protective factors especially in vulnerable communities (Kapucu, 2008).

Effective pre-disaster planning and preparedness builds a foundation of communication plans, trust, and relationships (Kapucu, 2008). This is particularly important for responding agencies, individuals and municipalities. Planning of communication will also facilitate preparation, as traditional communication channels will likely be impacted, and media training sends a more informed, consistent message. A key limitation in communication and disaster management is the lack of trust in government and execution of their recommendations (Kapucu, 2008). Emergency management has addressed this limitation by communicating with the community through other trusted sources: local media, local organizations, and local companies (Kapucu, 2008). Emergency management departments can utilize technology to both enhance communication in all stages of a disaster cycle, as well as build trust with constituents.

Having an accessible and user-friendly, portal-based website has been a determinant of credibility and trust in reviewing content, which is of particular interest in communicating information related to emergencies (Youngblood & Youngblood, 2018). Content standards (including information like location, contact information, external likes, subscription to information) provide emergency management with baselines for online communication (Youngblood & Youngblood, 2018). In addition to these content necessities, the actual appearance of a platform is a predictor of credibility and usability (Youngblood & Youngblood, 2018). This study has considered the populations of children (ages five and under), elderly (ages 60 and up), and the Karen population. Accessibility of web-based information, and therefore outreach, has to consider different abilities in order to remain usable, particularly when "visual, motor, hearing, and cognitive" abilities vary across the audience and many users will be accessing information on a mobile device (Youngblood & Youngblood, 2018).

Case studies on communicating emergency information have determined that radio and television remain key sources of media, particularly among demographics that are not heavily utilizing smart-phones (Youngblood & Youngblood, 2018). However, social media has begun to fill gaps in information communication around emergencies and preparedness. Social media updates are perceived as being a more frequently updated source of information, though credibility challenges could be improved through the presence of emergency management or through the development of a "emergency communication toolkit" (Youngblood & Youngblood, 2018). Individuals in communities may often be uncertain of the role that emergency

management departments play in their community, so this building of credibility and intentional outreach has the potential to reach communities that RCEMHS currently does not.

What is Ramsey County currently doing for community outreach and engagement?

The Ramsey County Emergency Operations plan articulates opportunities for community outreach and engagement in the emergency management process and disaster cycle. Pre-incident, preparation, and mitigation activities where public participation or public audiences are considered include preparedness reports, gaps-analysis, general public information, alerts and warnings, and communications ("Incident Command System Resources | FEMA.gov," 2018).

Ramsey County has been involved in community outreach and community engagement intentionally. Designated staff in specific departments work to network throughout the county with individuals, organizations, and issues happening in the communities. Activities like tabling, social media, newsletters, attending meetings, leading trainings, and participating in community events were discussed as methods of outreach and various levels of engagement. Engagement with the community was considered to be primarily project driven.

Interview Analysis

INCREASING IMPACT ON THE DECISION

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and proposals.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Figure 3: The IAP2 Spectrum of Public Participation

Qualitative analysis of interviews conducted revealed a number of themes and recommendations related to the Levels of Public Participation. Emergency management departments have rationale for utilizing various levels of the IAP2 Spectrum of Public Participation. Much of the necessary work involves sharing information that is critical for

constituents which requires no feedback, which falls in the level of informing. However, other levels on the spectrum provide insight, information, and feedback about the system that emergency management could use to perform activities that can better serve constituents in emergency and disaster situations. The levels, identified in Figure 3, inform, consult, involve, collaborate, and empower are discussed in relation to qualitative analysis of the interviews.

Inform

Emergency management frequently must share critical information with no feedback necessary, which falls under the "inform" spectrum ("What is the Spectrum of Public Participation?," 2017). Informing the community may be more effective when the message is re-iterated and communicated from different platforms. Analysis indicated that communities listen to trusted sources, which can be a government agency, but it may also be another organization, leader, or outlet. Additional identified outlets of communication include applications like Next Door, social media, email by neighborhoods, via organizations, television, newsletters, and letters in the mail. Barriers for providing the public with information include language, particularly with signage.

Consult

Consulting the community involved the intentional solicitation of comments and feedback ("What is the Spectrum of Public Participation?," 2017). Examples of this level of public participation include public comment, focus groups, surveys, and public meetings. Interviewees discussed the importance of reducing barriers to public meetings or focus groups to obtain representative consultations. Barriers like language, capital, and transportation were frequently discussed.

Involve

Involvement with a community requires intentional work and incorporation of community input into a planning process ("What is the Spectrum of Public Participation?," 2017). Involvement includes performing workshops or deliberative polling.

Collaborate

Collaboration with community and organizations in the community means involvement and power in establishing preferred solutions and alternatives ("What is the Spectrum of Public Participation?," 2017). These activities include citizen advisory committees, consensus-building, and participatory decision-making. Collaborative community engagement via partnerships was discussed among interviews. Leveraging partnerships and relationships to co-host an event or lead an initiative. The product is owned by both entities at the end of the process. Asset mapping was an identified example of collaboration.

Empower

Empowerment is the most engaged a community becomes during a decision process ("What is the Spectrum of Public Participation?," 2017). Decision-making power is either external to the county or shared, including citizen juries, ballots, and delegated decisions. An example of this activity is re-granting: a government-awarded grant is put into community leader or organizations' hands. This kind of activity moves all the way to empowerment of the community, where they are making decisions that are implemented. Qualitative analysis of

interviews reiterated that community members hold expertise in their community, and this value should be compensated somehow. In the field of emergency management, re-granting can be implemented to perform preparatory projects or make changes that mitigate harm. Reaching the empowerment level of the engagement spectrum may also be accomplished through intentional recruitment of community members into organizations that represent them, which was discussed as a method of improving law enforcement outcome in the community.

Summary

Community engagement, particularly during the mitigatory and preparatory phases of the disaster cycle, build social capital through increased trust, partnerships, and public participation in making decisions about their own community. Much of the current community engagement falls in the category of "informing" and interview analysis, literature review, and recommendations of this report advise movement across the public participation spectrum, towards engagement. Community engagement mitigates complacency towards emergency management and facilitates buy-in for participation in all phases of the disaster cycle. Consideration of existing barriers to effective community engagement were identified in interviews. Transportation, capital, language, time, fear and more were discussed. Themes indicated that flows of information and feedback must go between government and communities, rather than being a flow of outputs with no feedback or an extractive seeking of information with no feedback. When the community is effectively engaged in the disaster cycle, resource allocation improves in efficiency and efficacy because resources match the need of the community and are directed in relation to need. Partnerships with community organizations and strengthened internal relationships will facilitate the process of community engagement.

The Older Adult Community

Background

Older adults are defined by the U.S. Census Bureau as those 65 years and older. For this project, we include those 60 years or older based on the Older Americans Act (OAA) of 1965 (Fox-Grage & Ujvari, 2014). The OAA supports a variety of home and community-based services, including meals-on-wheels and other nutrition programs, in-home services, transportation, legal services, elder abuse prevention and caregiver support to people starting at age 60. The point at which people begin accessing services can be an indication of their vulnerability. Many of the agencies and community-based organizations providing these services are or can potentially be critical partners in developing resilience within Ramsey County's older population.

Older adults are a critical population for emergency management to consider because the older population is growing at a dramatic rate. By 2030, the national population of individuals 65 and older is expected to double (Aldrich & Benson, 2008) and Minnesota mirrors this trend. By the year 2040, the number of people 65 years and older who are living in Ramsey County will double from current numbers (Wolfe, 2017). The population of older adults is also becoming more diverse than ever before. Until recently the older population in Ramsey County has been mostly White. In 1990, 13 percent of Ramsey County's 65+ population were people of color. By

2014 this number increased to 30 percent and the Metropolitan Council predicts that number will rise to 45 percent by 2030 (Wolfe, 2017).

Along with the growing population other trends within aging encompass indicators of vulnerability and have the potential to influence the resilience of older adults in the face of a disaster. First, economic security is a concern. Fewer people are receiving retirement money provided by their employers and savings are at an all-time low. Nationally, 24% of people between the ages of 54-85 have insufficient retirement resources (Wolfe, 2017). In Minnesota 39% of workers in the private sector do not have an employee-sponsored retirement plan (John & Koenig, 2015) and Social Security is the only source of income for almost three in ten Minnesotans age 65+ (AARP, 2014). Older adults are going into retirement with less in savings and are on fixed incomes. In Ramsey County, 30% of people aged 65 and older have an annual income of $25,000 (St. Paul -Ramsey County Public Health, 2017) and 12% of older adults (65+) in St. Paul live in poverty (Egbert, 2014). Economic status is often correlated with resilience and older adults on fixed income have a more limited capacity to rebuild post disaster.

More people are choosing to age in community. Aging in community can be staying in one's home or in alternative housing within their communities. This trend is driven at both the policy and the individual level. Minnesota has been at the forefront of shifting the care of older adults away from institutions to aging in community for as long as possible. In 2007 Minnesota started funding grants to help people live well at home (Crosby, 2018). It is widely reported that aging in place can lead to better health outcomes, life satisfaction, and self-esteem, compared with aging in a nursing home. In addition, aging in place is typically more affordable than moving to an assisted living facility or nursing home (Guzman, Viveiros, & Salomon, 2017). Minnesota now spends more than $21 million a year through the federal Older Americans Act on programs and services that help older adults stay in their homes (Crosby 2018).

The policy changes to focus on home-based care and services also align with people's own preferences. Seventy-eight percent of adults aged 45 and older surveyed in 2014 stated that they would prefer to remain in their homes indefinitely as they age (Guzman, Viveiros, & Salomon, 2017). In Minnesota, a smaller number of people are living in housing designed for seniors. Nearly 89 percent of people surveyed in a 2015 Minnesota Board on Aging survey believed their neighborhood is a good place to live. Only 10 percent have plans to move in the next few years (Minnesota Board on Aging, 2015). According to the Census Bureau, 47% of adults 60 and older in Ramsey County live alone and if a person has not downsized in their 60s, they are likely to stay in their homes until age 85, when disabilities tend to increase (Crosby 2018).

The movement towards aging in community is widely seen as beneficial for the individual places increased reliance on family, informal social networks and formal home and community-based services to assist with daily living activities. According to the Minnesota Board on Aging 2015 survey:

- The majority of caregiving for older Minnesotans is provided by family and friends
- 83% of respondents age 60 and older who need assistance with activities of daily living (walking, dressing, bathing and feeding) or instrumental activities of daily living (managing medication, finances, transportation and meal preparation) receive some unpaid help, either alone or in combination with paid help
- 71% rely only on unpaid help

Furthermore, long term care needs increase with age as aging brings rising rates of disability among those who are living in community. Disability includes ambulatory, cognitive, hearing, vision, and self-care. Of Older Adults (Egbert, 2014):

- 20% of older adults age 65-74 have a disability
- 40% of older adults age 75-84 have a disability
- 60% of older adults age 85+ have a disability
- 32% of those ages 65 and older have one or more disability of any type.

The trends and statistics outlined for older adults including the growth of the aging population, lack of economic security and propensity to stay living in community are important considerations for emergency management. How and where older adults are living is changing. They are living in a variety of settings and are connected to varying levels of service through formal and informal networks. Emergency management, therefore, needs to be adaptive to the trends and changing needs of the population. The assets and vulnerabilities of this community impact response to disaster and how RCEMHS engages with them.

Older Adults and Emergency Management

Older adults are disproportionately vulnerable during disasters. During Hurricane Katrina, 71% of victims were older than 60 and 47% were older than 77. Most of these victims died in homes or communities (Gibson & Hayunga, 2006) and during the 1995 heat wave in the Midwest, the median age of the 465 people in Chicago whose deaths were heat related was 75 years old (Aldrich & Benson, 2008). A primary reason, older adults are particularly vulnerable both prior, during and after a disaster is because they are more likely to have chronic illnesses, functional limitations and sensory, physical and cognitive disabilities than of younger people (Gibson & Hayunga, 2006).

An estimated 14 million people aged 65 or older living outside an institution reported in the 2000 census to having some level of disability, mostly linked to chronic conditions including heart disease or arthritis (Aldrich & Benson, 2008). Similarly, the majority of Medicare beneficiaries age 65 and older experience two or more chronic conditions at the same time (Gibson & Hayunga, 2006). In addition, frailty is recognized as a physical condition that is distinct from both the normal aging process and disability. Characteristics of frailty include muscle weakness, slow walking, exhaustion and low physical activity (Gibson & Hayunga, 2006).

People with chronic conditions often need assistance with activities of daily living, however, multiple conditions are not necessarily correlated to a person's own assessment of poor health. In a study conducted by the New York Academy of Medicine, despite multiple chronic conditions, a majority of survey respondents rated their health as "excellent," "very good," or "good." This is an indication that even with multiple health issues people in normal circumstances are able to manage their care either on their own or through formal or informal networks. Yet, 13 million older adults aged 50 or older have said they would need help to evacuate during a disaster and about half of these would require help from someone outside the household (Pekovic et al, 2007).

After a disaster happens, conditions such as stress, lack of food and water, extreme temperatures and exposure to infections can cause a worsening of chronic illness (Aldrich and

Benson, 2008). The disruption to daily patterns, medication regimens, changes in nutritional intake can have a negative effect on a person's health (Evans, 2010). People aged 65 and older take three or more drugs per month. A change or disruptions in medication regimes can cause potentially serious and fatal complications (Gibson & Hayunga, 2006). Furthermore, certain disasters cause environmental pollution, including airborne particulate matter from large scale fires and collapsed buildings to mold spores from flood events. Both have the potential to cause and exacerbate respiratory functioning (Evans, 2010).

During response and recovery, older adults can struggle with standard relief efforts and amenities. Post Hurricane Sandy, older adults without transportation found it difficult to access distribution sites for food and water and in-person sites to access relief benefits. Another challenge was eating meals distributed by relief organizations, which contained excessive sodium, fat and calories for older adults. Access to medication and durable equipment being lost, damaged or left behind during an evacuation were also cited as concerns (Goldman, Finkelstein, Schafer, & Pugh, 2014).

A common denominator of how disasters affect older adults is the disruption of systems and services upon which older adults rely including transportation, communication, health care, and social supports (Goldman, Finkelstein, Schafer, & Pugh, 2014). When older adults are cut off from social networks due to loss of electricity or communication, they may be unable to maintain situational awareness and obtain resources. Older adults with stronger and more numerous connections are better able to have their needs met, whereas those with fewer and weaker connections are more likely to feel abandoned (Goldman, Finkelstein, Schafer, & Pugh, 2014).

Beyond the physical factors which make older adults vulnerable, socio economic factors also contribute to their vulnerability. Poverty is a risk factor for all people, but because poverty is strongly associated with poor health status, high poverty rates in older Americans make them particularly vulnerable (Goldman, Finkelstein, Schafer, & Pugh, 2014). Poverty is also generally associated with poorly constructed housing or older housing stock, a lack of insurance and decreased ability to recover economically after a disaster. A lack of income and savings makes preparing and recovering from a disaster even more difficult.

Additional factors which contribute to vulnerability are whether they live alone, have the ability to drive or access to transportation, lower literacy levels than the general population, and ESL proficiency (immigrants who are 65 and older may not speak English). All of these factors can affect one's ability to prepare and recover during a disaster.

Assets of Older Adults

It is easy to focus on the numerous vulnerabilities of the older population, but they are a heterogeneous group. It is important to understand the diversity and broad spectrum of the population as well. Older adults can be one of our greatest assets in preparing and recovering from disasters. Older adults have a desire to stay actively engaged in their communities. This is illustrated by their historically high rates of volunteerism and philanthropy. More than 6 out of 10 adults age 55 and older engage in some volunteer activity including a mix of formal and informal activities (Zedlewski & Schaner, 2006). In Minnesota, nearly 287,000 volunteers age 65 and older contribute an estimated $459 million in donated labor every year (Minnesota Compass, 2014).

Older adults are underused resources in preparing for and responding to disaster. Experience and judgement increase with age and are important attributes in times of disaster (Gibson & Hayunga, 2006). There is also evidence to support the fact that older people are more psychologically resilient than younger people after a disaster due to being "inoculated" to stress over the years. Older adults who demonstrate this type of adaptability make ideal volunteers during response and recovery efforts (Goldman, Finkelstein, Schafer, & Pugh, 2014).

Interview Analysis

Based on interviews with organizations serving older adults the following themes were identified which contribute to the older population's resilience to disasters. The themes are trust, technology and communication, isolation and social networks, resilience of older adults, and leveraging community-based organizations.

Trust

Trust was mentioned across the board as a vulnerability and barrier for older adults. Trust with the government and trust with people outside their networks or groups. Trust in government was specifically mentioned as a barrier for Hispanic and African Americans. Older adults do not trust people outside their network and are cautious towards other people they don't know. As one staff stated, "They have their groups and stick with them." Older adults connected with community-based organizations do have a strong level of trust in the organization and the staff. Through receiving services and attending events coordinated by the organizations, older adults get to know staff and over a period of time build a trusting relationship. Older adults look to the organization as a source of support and resources. They trust the messages and information that come from the community-based organizations, staff and volunteers. On the flipside, there was also concern for older adults being taken advantage of post disaster through disaster related fraud or scams.

Technology and Communication

A second theme that emerged is the lack of technology by older adults and reliance on landlines, network news and the newspaper. Landline phones are most prevalent with older adults. Organizations reported a small percentage have cell phones and of that, older flip phones are more common than smartphones. Email and social media are used by a small percentage of older adults receiving services by community-based organizations. If they do have email or are on social media, they may not access it regularly. It is not a primary source of communication. One organization cited economics as a reason in part for this. Older adults are on a fixed income and may not be able to afford internet in their home. Organizations rely on more traditional methods such as newsletters, flyers, and phone calls to communicate with clients.

Older adults are connected to the organizations and services through a variety of methods ranging from referrals through the county, family or caregivers, and through the organization's presence in the community. Organizations host events or provide services throughout the community and information spreads through word of mouth. The organizations themselves do not rely on email or social media as a reliable source of communication with clients, although they may use those tactics to communicate with families, caregivers and the broader community,

Isolation and Social Networks

As much as staff who were interviewed talked about the strong connection between the organizations and the older adults, staff also cited isolation as a vulnerability. Factors contributing to isolation include lack of transportation and mobility and/or functional disabilities such as loss of hearing or vision. Organizations provide formal networks through home visits, services, wellness events, but the presence of informal networks seemed to vary among older adults. Social networks were highlighted as a strength when present, but isolation was still a concern. In the case of one service provider in Ramsey County 70% of clients lived alone and in their annual survey of clients over half said the volunteer is the only person they see in a day. On the flipside, another organization highlighted that clients who were long-term homeowners were integrated into their community and there was a strong sense of neighbors helping neighbors. Common gathering places which facilitated connections for older adults included faith-based organizations, libraries, community centers and programs and activities provided by community-based service providers.

The presence of families varied, when present it is an asset, but many do not have family or are estranged which contributes to isolation. A disruption of services like Meals on Wheels, in home personal care, medication, and transportation services were all listed as vulnerabilities. In addition, a general reluctance to ask for help was highlighted as a vulnerability specifically unique to the older population. Descriptive phrases highlighted include, “I don’t really need help”, “I can do it”, “I can tough it out." This attitude can be connected to their resilient nature through life experience. Service providers were also concerned with their lack of ability to advocate for themselves in an emergency or disaster situation. They could easily be taken advantage of.

In communities with a lower economic status there was greater concern on the effects of a disaster because of the general lack of resources. For example, where would people go if they lost their housing? In addition, compounded with a low socioeconomic status, interviewees highlighted the vulnerability of older adults who are illiterate, have Alzheimer’s/Dementia and those who do not have bank accounts.

Resilience of Older Adults

The primary asset of older adults cited in interviews was their resilience. Life experience has developed an inner strength and capacity for older adults to weather hardship. One interviewee stated they have “a strong reserve.” Multiple interviewees cited the Depression as developing coping skills and resilience in older adults. Phrases used to describe older adults included “tough cookies” and “they have wisdom to get through so much.”

Better Leverage Community Based Organizations

A primary result from the interview analysis is that community-based organizations are an under-utilized asset. There is a broad network of organizations that work within the aging community, yet they seem to have little connection or knowledge of emergency management. They engage with the county in a somewhat transactional nature in the form of referrals for services and resources for county case workers. Community based organizations are connecting with older adults on a regular and sometimes daily basis. They are seen as a trusted resource to older adults and thus should be a stakeholder at the table for emergency management planning.

Children Under the Age of 5

Background

Children represent almost a quarter of the U.S. population; however, their size and importance in communities is not reflected proportionally in many emergency planning and management processes (Bartenfield, Peacock, & Griese, 2014). In Ramsey County, children under 5 make up about 7% of the population, of that, 6.8% are domestic-born children and 0.2% are foreign-born. ("Ramsey County, MN," n.d.)

Children under the age of 5 are considered vulnerable for a number of reasons that include anatomic (size and body surface area and skeletal), physiologic, immunologic, developmental and psychological issues. All these elements are important for planning for the care of children in disasters or multi-casualty incidents (Gausche-Hill, 2009). Characteristics of children in chemical, biological, radiological, and nuclear (CBRN) emergencies make illnesses in children from these instances difficult to prevent, identify, and treat (Bartenfield, Peacock, & Griese, 2014). Due to their vulnerabilities, children's needs should be imbedded into each stage of emergency planning and management.

There are many obstacles currently facing emergency preparedness with children. According to an analysis of patients presenting to disaster medical assistance teams, pediatric patients are more likely to have no record of severity of illness, making it difficult to provide them the correct services (Gausche-Hill, 2009). There is a risk in children experiencing underdevelopment in physical activity, communication, and in self-preservation instincts due to disasters (Bartenfield, Peacock, & Griese, 2014). The inability to embed the needs of children in disasters, if not addressed, could have side effects that are generational and surpass the disasters themselves. The concern of the wellbeing of children in all circumstances including disasters is a value supported by international actors like the United Nations Convention on the Rights of the Child (CRC) (Penrose & Takaki, 2006). They recognized the importance of having emergency plans that are informed by the needs of children. Results from a study conducted by Plan International, indicate that children can alleviate losses in natural disasters and their involvement is essential to community recovery (Middleton & Burt, 2006).

Children Under the Age of 5 and Emergency Management

According to a policy report, out of all emergency departments, only 6% of them have all the equipment identified as important for the care of children (Middleton & Burt, 2006). The current status quo of many emergency departments in the U.S. is not sufficient or acceptable for serving children. There is room for current emergency management systems to show more dedication to providing the best services possible for children before, during, and after a natural or human-made disaster.

There are a variety of avenues on how to incorporate the needs of children into emergency planning and management to better serve children during disasters. One approach is to focus on the internal capability of an organization. In a systems approach, an organization can obtain Emergency Medical Services for Children Pediatric Facility Recognition and overall enhance pediatric disaster expertise (Gausche-Hill, 2009). Hiring a pediatric coordinator for

emergency care or developing a pediatric specific mass-casualty plan specifically for in schools can better inform planning and management (Allen, Parillo, Will, & Mohr, 2007). In combination with internal changes, externally, children are in many ways an underestimated resource for better informing emergency planning and management for children. There are findings that suggest the position of children in society as possible informants within various communication networks have been underutilized. Children can have a positive impact in disaster risk reduction (Mitchell, Haynes, Hall, Choong, & Oven, 2008). Children are able to enter intimate circles that are not always achievable by government entities by being valuable messengers of relaying information to their families (Izadkhah & Hosseini, 2005).

Interview Analysis

Children under 5 are a unique group because of their status as dependents. Legally, children are treated differently than adults (anyone over 18 years of age). Their capacity for resilience is dependent in part on their families' socioeconomic status and the systems (i.e. school, childcare,) and networks (community, familial) they are connected to. Based on interviews with organizations serving children under 5, we found themes in language, technology, and that fear can lead to a lack of information.

Languages

As one of the most diverse counties in Minnesota, Ramsey is experiencing an increase in Limited English Proficient (LEP) populations that primarily use another language other than English. Of the interviewees, organizations that serve young children were concerned by the challenges that language may pose to their ability to effectively provide service. A service provider noted that among the children their organization serves, a large number were from immigrant and refugee backgrounds, which contribute to the language challenges the organization faces. In all interviews, English was a barrier to some capacity to getting information out to families with young children. There were attempts to address it by adding staff that reflect the diversity in Ramsey County's workforce. The challenge still remains to continuously monitor language needs that could arise in order for organizations to effectively communicate information. If clients' language needs go unaddressed, a critical decline in service quality could grow, children could be separated from families, and people could be kicked out of their homes. Ultimately, the consequences of not monitoring language needs can potentially devastate families in Ramsey County.

Technology Usage

Technology is a critical part of a large majority of society as it has become essential to how individuals communicate. All organizations interviewed communicate with their clients through website, phone calls, and emails. There have been efforts to expand service abilities using technology. For example, some organizations mentioned interest in creating mobile applications to help with service delivery; however, texting is the most popular method to send updates and reminders to individuals. This kind of communication provides a direct, more immediate, and less disruptive form of contact with families.

The high poverty rate in Ramsey County can result in a more transient population, making it difficult for organizations to keep track of current mailing addresses. Interviewees noted that people do not change their phone number nearly as much as their address. An

interviewee pointed out that a phone number is one of the most consistent things an individual will have so it becomes a reliable source of communication, even more so than mailing, which could get lost or destroyed.

Fear Leads to a Lack of Information

A key theme in the interviews was a lack of awareness of resources by families, which an interviewee attributed to a fear of government or asking questions. This fear often leads to little knowledge of resources available to individuals and children in the community. An organization highlighted that immigrants who are refugees often come from countries where their government misled them, harmed them, and in turn, broke their trust in government entities. Refugees often bring their perception of government, good or bad, with them to the U.S. This tends to lead to communities of refugees or immigrants that are fearful and lack awareness of information. Interviewees did not mention an approach that has been particularly successful in addressing this concern.

The Karen Community

Background

The United Nations High Commissioner for Refugees (UNHCR) defines refugees in the *1951 Convention and Protocol Relating to the Status of Refugees* as someone "owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it." That is, a refugee is an individual that cannot return to their country due to persecution by the government because of their race, religion, nationality, membership of a social group, or political opinions.

The Karen people are an ethnic minority group from Burma that were persecuted by the Burmese government ("Karen History," n.d.). They were forced to leave the country due to the violence and oppression they were facing. Many fled to refugee camps in Thailand and eventually resettled in the United States and other countries ("Karen History," n.d.). Karen immigration to the US started in the 2000's, with the largest wave in 2005 and continues to this day (City of Saint Paul Communications Services, 2016). About 17,000 live in Minnesota and within the state, Saint Paul is estimated to have the largest concentrated population ("Karen History," n.d.). Other densely populated cities are Roseville and Maplewood (City of Saint Paul Communications Services, 2016).

The Karen Community and Emergency Management

Because of their relatively recent (in the past 20 years) resettlement in the US, research on the Karen population and their relationship with disaster preparedness in the US does not exist. There are studies on generational differences between older and younger Karen refugees (Yarris, Stasiun, Musigdilok, & Win, 2015), engaging Karen students in the classroom (Harper

2017; (Smolen, Zhang, & Detwiler, 2013), effective collaboration methods between the Karen community and government agency (McCleary, Horn, Toe, Dwee, & Sniffen, 2018), Karen cultural resilience in the U.S. (Spivey & Lewis, 2016; Harper, 2016) and challenges of resettling in a new country (Mitschke, Mitschke, Slater, & Teboh, 2011).

Although these studies do not explicitly mention disaster preparedness, some do mention barriers to resettlement that can contribute the community's overall resilience to disasters. For example, in a qualitative study that interviewed twenty-one Karen adults living in the U.S., D.B. Mitschke et al (2011), found that disillusionment was a major theme in their interviewees. The interviewees thought their lives would be improved compared to their conditions in Burma and Thailand, but they were disappointed in their current living situation in the U.S. Many struggled to find employment and establish financial security. Among other concerns were access to affordable healthcare. Interviewees had trouble navigating the healthcare system because of its complexity and because of not being able to communicate in English. Language barriers also played a big part in successful acculturation (Mitschke, Mitschke, Slater, & Teboh, 2011; McCleary, Horn, Toe, Dwee, & Sniffen, 2018). Mitschke et al says, "According to participants, the language barrier is the most pervasive impediment to their success in the United States" (2011).

Secondary literature from the Karen Organization of Minnesota (KOM), the only Karen-based social services nonprofit in Minnesota, also states that employment related issues, housing and limited-to-no English proficiency are barriers the community experiences (City of Saint Paul Communications Services, 2016). KOM states that most Karen are low-income and there are often four to seven individuals living in one apartment (City of Saint Paul Communications Services, 2016).

Interview Analysis

Three main themes of resilience emerged during interviews with several organizations that serve the Karen population of Ramsey County. The themes are: the impact of the refugee experience on resiliency, importance of non-profit organizations, community connectedness.

The Refugee Experience

Vulnerabilities that are attached to the refugee experience in the U.S. were identified by interviewees as challenges to disaster preparedness and recovery. When asked about the observed vulnerabilities of the Karen community, one interviewee said, "…when people come here as refugees, they have already lived through more hardship and 'disasters' in life than we might be considering a 'disaster'. So emergency preparedness may be lost on them or they may really not want to hear about things that might scare them or their families." Another interviewee said, "Recency of arrival to the U.S. can [make it] more difficult in knowing how to deal with emergencies and/or crises." A Karen individual also reiterated the point by stating the newness of the community is what makes them vulnerable to impacts of a disaster. In other words, the length of time a community has been established is a factor in how well they can respond to emergencies.

Other vulnerabilities that are often a part of refugee experiences are language barriers, a lack of financial stability, and a lack of transportation. An interviewee mentioned that because systems of alerts are in English, it makes it difficult for Karen individuals to understand what is happening. Being low-income is another challenge to disaster recovery. Because many low-

income Karen individuals depend on social benefits, dependence on those benefits can impact how economically resilient the individual can be after a disaster. An interviewee said that living in poverty limits how Karen individuals can respond financially to a disaster. A Karen interviewee said that most families go to Ramsey County for food stamps and rent assistance so if there is a disaster, they would need assistance to make sure they were still getting those benefits.

Importance of Nonprofit Organizations

Nonprofits play an important role in helping Karen families and individuals acclimate to a new country and access social benefit programs. Programs like Supplemental Nutrition Assistance Program (SNAP), Minnesota Family Investment Program (MFIP), Housing Choice Voucher (HCV) Program and employment assistance programs were mentioned during the interviews as common benefit programs Karen families and individuals received. Because of the Karen people's respect for experts and leaders, the importance of these organizations cannot be understated. As one interviewee said the community tends to "defer to experts" and "tend to trust 'authority'."

The initial point-of-contact is during the first ninety days of arriving in the U.S. Families and individuals work with one of the four federally-contracted refugee resettlement organizations in the Twin Cities metropolitan area. The organizations help families find housing, provide transportation from the airport, get children registered for school, connect adults with English classes, and apply for public benefits through the county. They also provide services essential to everyday life such as transporting clients to and from the grocery store and a cultural orientation. It was noted during the interview that the orientation curriculum is stipulated by the federal government. It includes topics such as learning how to budget, understanding the healthcare system, safety in the home, how to use appliances, the naturalization process, consequences of breaking the law, cultural norms, cultural adjustment, hygiene practices, and rights under refugee status.

KOM plays an especially crucial role in the community. The organization was specifically created to address the need to assist Karen individuals with resettlement. The organization provides services such as training on how to take the local transit system, applying for public benefits, finding employment, and locating housing. The organization was cited as an important resource by other nonprofits and government agencies that were interviewed. Many of those nonprofits and government agencies also have prior or currently existing partnerships with KOM. For example, the refugee resettlement organization has a contract with the State of Minnesota to partner with KOM to match clients to KOM's services. Currently, the organization serves about 3,000 individuals a year.

Despite offering a wide range of services organizations that were interviewed stated that they did not have a plan to help the community respond and recover from disasters. The organizations had their own internal plans in case of emergencies, but no such infrastructure exists externally.

Community Connectedness

The theme of connectedness is found throughout the emergency management process. Although no formal infrastructure for community-based disaster preparedness and recovery exists within the organizations, interviewees noted that in times of need, the community will depend on each other. When asked "*What resources or strengths does the community (or your*

organization) have to help respond to a man-made/natural disaster?" all interviewees cited the internal connectedness of the Karen community as the most mentioned strength. One interviewee said that, "They are a close-knit community – word travels fast." Another interviewee pointed out that the Karen people have a deep respect for authority and have designated community leaders. This can be supported through an interview with a community leader who said that if there was any need in the community, he would know about it. He noted that his interaction with the community goes beyond his professional capacity. He often helps families fill out forms for social benefit programs and translate government mail.

Interviews revealed that religion provides an important platform to facilitate community connectedness. KOM estimates that 80% of the community is Christian and 20% is Buddhist. Their website lists two Karen temples and fourteen churches. An interviewee who is both a direct service provider and a church leader said that most Karen people receive their news through their church and the church plays a crucial role in helping newly arrived Karen families get resettled. The same interviewee said that their church plays a leading role in disaster recovery by starting donation and food collections.

Discussion

Three themes were consistent in the literature and across all the demographic groups studied: importance of public benefit programs, engagement with direct service providers, and overall lack of awareness of emergency management. In the next sections, the findings in the context of the project's four main research questions and considerations for further analysis will be discussed. The research questions are: *1) What assets and social vulnerabilities could inform Ramsey County emergency response to natural and man-made disasters? 2) What factors influence how communities build resilience and respond to natural and man-made disasters? 3) How have local governments effectively cross collaborated to build resilient communities and serve communities in times of disaster and recovery? 4) What outreach strategies are effective in reaching vulnerable communities?*

Main Findings

Public Benefit Programs

A major overlapping theme for all three demographic groups was the usage of public benefit programs. It was found that individuals and families become connected with social insurance programs through a nonprofit service provider or adjacent programs such as Head Start. This touchpoint into the community serves as a potential effective outreach strategy. It can inform disaster resilience in these groups regarding the benefits they receive, how they receive it and how often. While RCEMHS does not administer these programs, intra-agency partnerships can utilize the insight and relationships that exist within the community to better serve them throughout the disaster cycle. As mentioned in the Karen interview analysis, an interviewee noted that people who depend on government assistance will most likely need to know how to access those benefits after a disaster. Having access to those benefits is crucial to economic resilience of vulnerable populations.

Direct Service Providers

The utilization of social insurance programs informs the important role of direct service providers in the everyday lives of our defined groups. Families and individuals in each group have some type of interaction with a government agency or a nonprofit that works with a government agency. Identifying these access points can be helpful in determining intra-agency and external outreach strategies. Providers gain valuable face time with the clients through required regular appointments. These face-to-face meetings help build trust and repertoire with clients who may have a history of government distrust. In groups where word-of-mouth is a reliable avenue for obtaining information, words of trust, credibility, and otherwise can spread quickly.

Lack of Knowledge

The last theme established through the interviews was the general lack of knowledge about RCEMHS and emergency management. When asked if they had any collaboration or interaction with RCEMHS, most organizations said no and some even stated being unaware the department existed. The organizations had their own internal plan for disaster preparedness but nothing community-focused. Several interviewees astutely pointed out that individuals who have faced and are facing hardship in their lives are not inclined to think long-term about disaster preparedness. They are simply trying to live day-to-day.

Considerations

One aspect that was not discussed is the importance of intersectionality between the demographic groups. Intersectionality is described by Kimberlé Crenshaw (1989) as the interconnection and interdependence of race, class, gender, and other socially constructed categories. Although the qualitative research did skew towards interviewing nonprofit service providers and agencies that serve a specific socioeconomic class, the report also does not discuss the varying social identities that exist within each group and the gaps that exist between sub-categories in each group. For example, within older adults over 60, there is a varying degree of how each person will respond and recover from disasters. Some adults over 60 with more monetary resources or support networks will experience disasters differently than an older adult that lives by themselves and is living on a small fixed monthly income. Interconnectedness exists between the demographic groups as well. Although each group was treated as independent of each other, there is a clear overlap in social identities of Karen individuals and adults over 60 as well as with Karen individuals and children under 5.

Despite the usage of public benefit programs providing insight into community assets, vulnerability, and resilience, there are individuals or communities that are not utilizing public benefit programs or strongly connected to community-based organizations. Across all communities, there will be people who are not connected to services for a variety of reasons. They may not need them, they may not qualify, or be aware of their existence. It is this population that is not accounted for in analyzing the various touch points highlighted in the report. A primary factor of community resilience is connectivity, yet often emergency management is focused on the preparedness of singular family units or individual. To get at communities of people who are not connected formally to services, it is important to increase connectivity among individuals across all communities. As an example, Los Angeles County Department of Public Health shifted their emergency preparedness messaging from “Just Be Ready” to a more community resilience focused message of “Know Your Neighbors. Plan

Together. Be Ready." As part of the campaign residents were encouraged to meet with neighbors and to prepare individual and neighborhood disaster plans. Their campaign highlighted connectivity as a central feature of a community's ability to mitigate and recover from a disaster (Plough et al, 2013).

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Recommendations

The following recommendations represent a paradigm shift in how Emergency Management engages with communities. In the same way that disasters are local and disaster response begins at the local level, building resilience is most effective if it starts with the local community and its residents (Cutter et al, 2013). Provided below are five recommendations which are aligned with the Rand Corporation's Community Resilience Framework and focus on a human centered approach in engaging with communities. These recommendations focus on expanding the ways in which communities are engaged with emergency management, not just as a receiver of information, but in co-creating disaster management strategies. By engaging community in the process, Emergency Management will develop more effective community outreach and communications plans and partnerships leading to increased community resilience, thus answering to the established research questions about effective outreach, collaboration, and engagement.

Community Resilience Framework

Community resilience literature identifies numerous factors which are likely correlated with increasing a community's resilience. Yet, there is less clarity on specific strategies and tactics communities can implement to build resilience. To fill this gap, the Rand Corporation, developed a community resilience framework shown in Figure 4 below (Chandra, 2011). The framework identifies building blocks of community resilience that affect a community's pre-event vulnerability to disaster and its adaptive capacity to recover. Their process for developing the framework included conducting a literature review, holding a series of focus groups across the United States and convening three meetings with subject matter experts. From the research conducted, they developed a framework composed of building blocks of community resilience and eight levers of action. The building blocks are physical and psychological health of the population, social and economic well-being, individual, family and community knowledge, attitudes regarding self-reliance and self-help, effective risk communication, social integration of government and nongovernmental organizations and social connectedness (Chandra, 2011).

In the framework, the eight levers of wellness, access, education, engagement, self-sufficiency, partnership, quality and efficiency are meant to strengthen the main building blocks, which are associated with community resilience. Activities related to the levers strengthen each component and moves a community closer to achieving community resilience as it conducts more activities. The process is in a circle because building resilience is iterative and ongoing (Chandra, 2011). Even though the framework was developed with health security in mind, it is transferable to emergency management. For the recommendations section, each recommendation is aligned to a lever of action. Using the framework creates a visual of how the recommendations interact and contribute to community resilience.

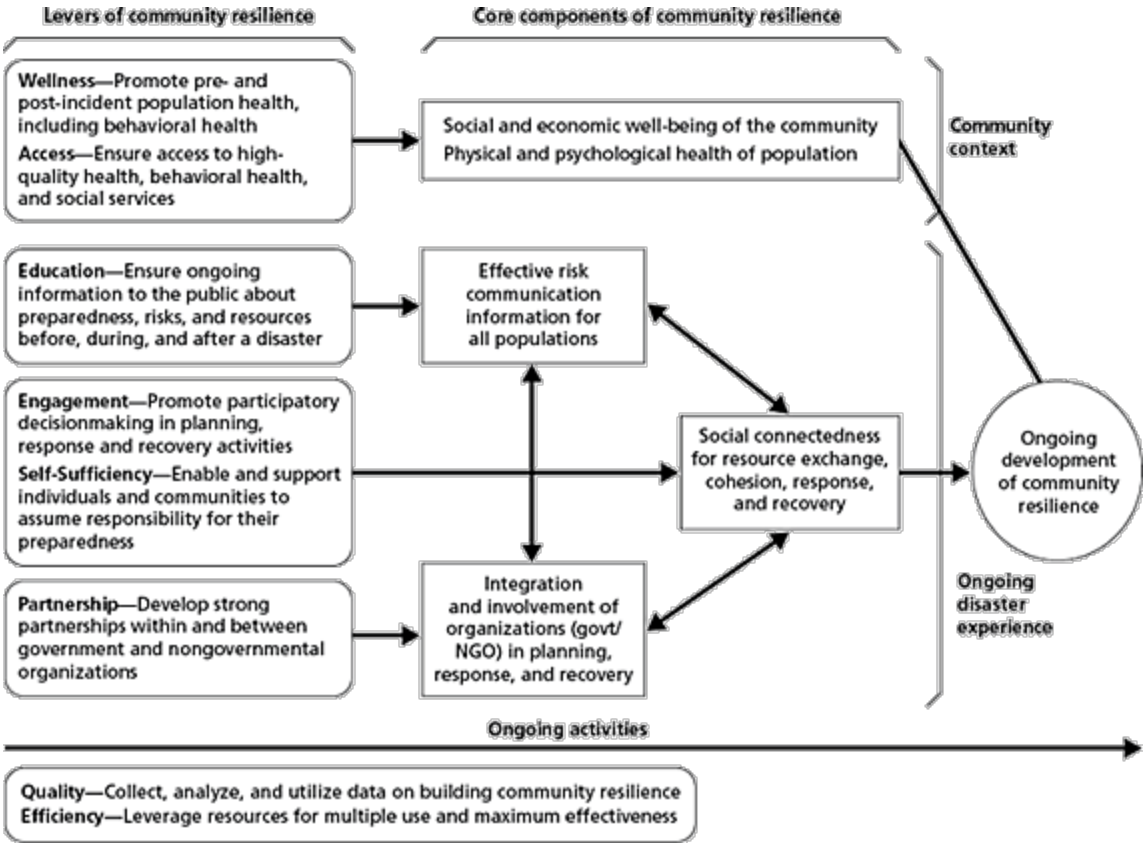


Figure 4: Rand Corporation's Community Resilience Framework

Use Human Centered Design Thinking

(Community Resilience Lever: Engagement)

Human centered design or ''design thinking'' is a process for innovation that prioritizes the needs and values of the people most affected (Vechakul et al, 2015). Adopting a human centered approach can help break agencies or institutions out of ingrained ways of thinking and doing. For example, if traditional outreach methods are not reaching a changing population, using design thinking methods can help understand the population in question and generate new ways of doing. It is an approach that develops solutions by involving the people for whom the problem is being solved in all steps of process. Human centered design recognizes that problems are increasingly complex and that solutions must be adaptive. It is not a standardized static process in which the same sequence of steps and methods are applied in all contexts but is fluid and most effective when it is adapted to suit different contexts (Vechakul, Patel Shrimali, & Sandhu, 2015).

One recognized framework for public service design by Christian Bason includes three phases, exploring the problem space, generating alternative scenarios and enacting new practices. In "exploring the problem space," qualitative research tools play an important role to enable empathy with "end-user" experiences with services. Developing empathy for the end-user is a core foundation of design thinking. In "generating alternative scenarios," a diverse set of stakeholders (including end-users) are engaged to co-create potential solutions. Working in diverse teams challenge assumptions and stimulate new ways of thinking. Design thinking as a creative process facilitates a wide divergence of ideas leading to the creation of alternative

scenarios or ideas. Finally, design thinking offers tools (i.e. concepts, systems maps, graphics, products, etc.) to help give form to new policies and services in practice. The phases of design thinking are not sequential, but are intertwined and overlap between design research, developing ideas for service and implementing ideas to engage a wider audience (Bason, 2017).

Design thinking is particularly suited for emergency management because of its complex and dynamic nature. Human centered design as an approach can respond to the complexities of emergency management and increase public value. If people are involved in the process, they are more likely to respond when needed. People need to see that they are part of the solution. A fundamental characteristic of Design Thinking is its focus on the collaborative way designers work and in participatory methods of co-creation. It encompasses an attitude from designing 'for users' to the human centered approach of designing 'with users' (Tschimmel, 2012). Design thinking is a structured and inclusive process that can leverage the strengths and insights of emergency management staff, organizations, and community members to increase the likelihood that solutions will be successful.

Design thinking methods can be incorporated into community engagement activities that RCEMHS conducts to co-develop effective outreach and communication plans. The d.school through Stanford University provides a toolkit of design thinking tools and processes that can be used to guide RCEMHS staff and collaborators.

1. Conduct a Community Engagement Assessment

(Community Resilience Lever: Engagement and Quality)

Internal assessment of existing relationships with the community will reveal where strong networks and ties exist and where a gap may exist, particularly among relations with vulnerable communities. A number of the following recommendations build on community engagement and outreach, so using tools to grow engagement further these processes. An existing tool and resource, the Nexus Community Partners Community Engagement Assessment Tool (Appendix B for assessment tool) can be used internally to determine where RCEMHS currently falls on the spectrum of community outreach and engagement. Such tools identify specific activities, limitations, and the purpose for engagement activities. Self-assessment reveals existing relationships, current activities, purpose for activities, and more to move towards a higher capacity of community engagement. Meaningful engagement with diverse organizations depends on the participants, which are often voluntary in nature, and this form of assessment can aid in the most efficient resource allocation (Kapucu, 2006). This exercise may also strengthen internal relationships, which are critical to coordination of projects and resources within Ramsey County.

Recommended strategies:

- Network mapping of RCEMHS relationships through a graphical depiction of network structure.
- Internal mapping or networking of projects, expertise areas, and individuals will allow RCEMHS to improve internal collaboration. Strengthened internal coordination and communication helps eliminate high-frequency errors during a stressful event, as previously discussed.
- Improve community engagement skills of emergency management staff to effectively implement design thinking strategies.

2. Cross collaboration within Ramsey County and with other agencies

(Community Resilience Level: Partnership)

Disasters are trans-boundary and jurisdictional in nature. As a result, organizations across varying degrees of authority are involved in a response. Increased community engagement for preparedness can be a platform for addressing neighborhood public safety/health concerns. Collaborative activities across departments can strengthen community social ties and improve dialogue and trust between the community and public agencies (Plough et al, 2013). Trust in community organizations make them a credible source to distribute resources and information, especially for communities that may be skeptical or distrusting of the government, or isolated intentionally or unintentionally from public affairs. These relationships also provide access into informal networks that are a part of the daily life of the communities RCEMHS serves. In addition, these relationships provide opportunities for delegation and a horizontal spread of action, which reduces the burden on an individual level responsible for emergency response.

Recommended Strategies:

- Leverage existing relationships in other departments that the County has crafted: there are many touch-points in the community every single day.
- Pre-disaster communication builds resilience in communities- but only if it is accessible. Multimedia communications, signs, etc. in inclusive languages help increase reach, especially into vulnerable populations. Content standards and different abilities are also necessary to consider, as discussed in the Community Engagement section in this report.
- Positive feedback for information sharing is sometimes the only incentive to continue doing so, so a culture of credit acknowledgment and emotional rewards reinforce systems thinking and information sharing.
- Having strong community partners and relationships across County departments brings RCEMHS into a core-periphery network. Strong partners act as brokers to the community at large, where existing relationships relay information and resources through trusted channels.
- Model New York's MVAC: a position that served as a coordinator for organizations that respond to disasters by aggregation of information and data, referring, and informing foundations of needs.
- Development of a product for the community with non-profits, private organizations, and the community: https://www.fairfaxcounty.gov/emergencymanagement/sites/emergencymanagement/files/assets/cerg%20final%20jan%2030%20final.pdf.

3. Develop an Emergency Preparedness Coalition of Community-Based Organizations

(Community Resilience Lever: Engagement and Partnerships)

Akin to the regional Healthcare Coalitions, develop a coalition model to engage community-based organizations who serve identified vulnerable populations. The coalition can help facilitate engagement activities with community members (i.e. end-users) to develop and provide feedback on disaster communication, outreach, planning and response. There is also overlap between community-based organizations, social services and public health. Collaborate

to leverage the touch points that different agencies have with older adults, children under 5, and the Karen community.

Strategies to Leverage Community-Based Organizations:

- Organizational staff can assist with outreach - helping to craft and deliver the message.
- Organizations can serve as a secondary notification and communication point in emergencies.
- Organizations may not be able to release client-specific data due to data privacy laws but could provide aggregate data on people they serve within geographic boundaries of their service areas.
- Engage volunteers from community-based organizations. Provide training and define roles for current volunteers of community-based organizations in the case of an emergency or disaster.
- Organizations can assist connecting older adults to needed resources in the case of a disaster, act as advocates on behalf of individuals.
- Integrate outreach, training and information sharing into regular communication, events and programming conducted by community-based organizations.

Examples of Potential Collaboration:

- Some community-based organizations hold regular programming on topics of interest, RCEMHS could collaborate to deliver a workshop.
- Engage Meals on Wheels to share information in planning for emergencies and/or deliver emergency preparedness kits to clients.
- Emergency kits for members of the Karen population may look different than emergency kits for older adults, shelter amenities may need to be different to account for older adults' functional abilities, and dietary restriction for various populations may need to be taken into account for planning at shelters or potential food distribution sites. Coalition and community members can help define what makes sense for each population.
- Community-based organizations often have partnerships with private foundations. In times of disaster, the organizations could leverage their partnerships to support in response and recovery efforts.

4. Leverage Volunteer Capacity

(Community Resilience Lever: Engagement and Education)

If engaged effectively, volunteers can be an asset during the disaster because of their possible connection to the community. Many nonprofits rely on volunteers to run their programs and organize events, so the connection with individuals willing to volunteer already exists. Utilizing volunteers from other organizations is an opportunity to use resources already available. Engaging with volunteers have the ability to inform disaster preparedness and response in a more holistic way that is reflective of the area being served. These volunteers play a critical role in the ability to help in disaster preparedness and response largely in part because they are already a trusted person in the community.

Training and education are important to engage volunteers. Training should include cultural, linguistic, and developmental needs of the younger and older populations. Training should involve older adults and experts in geriatric care, experts in early childhood education and

pediatric care, as well as leaders of identified ethnic communities in the content development and delivery. Seasoned volunteers can be used to train new volunteers. Volunteers already involved in organizations are dedicated individuals living in the community with untapped knowledge and expertise of the community and can increase responder engagement for RCEMHS. For example, the medical reserve provides this service to the University of Minnesota: students, staff, and faculty are trained in emergency response (CPR, stopping bleeding). In the event of a disaster, a subset of civilians has training on response and can prevent further harm.

5. Community Engagement-Based Model for Emergency Preparedness

(Community Resilience Lever: Partnership, Education, Engagement)

Adopting a community-based disaster management model recognizes communities as stakeholders in disaster preparedness planning. It promotes a bottom up approach that works in collaboration with the top-down ICS model currently used by RCEMHS to address emergencies and disasters (Pandey & Okazaki, 2012). It is essential that government recognizes and that communities realize they have a role to play in emergency preparedness and building community resilience. In this approach communities take part in creating plans and decisions and are a player in the implementation. Community based engagement places more of a focus on relationships between government and the community, community context and long-term engagement. In reference to the IAP2 Spectrum of Participation, a community-based model for emergency preparedness moves RCEMHS from Informing to Involve, Collaborate or Empower stages.

Elements of a Community-Based Approach may include:

- Risk assessment process engaging local community members and incorporates their perception of vulnerability and capacity.
- Asset-mapping with communities.
- Disaster preparedness training/education aligned with objectives and needs of the community.
- Re-granting of funds to community organizations.

Community Engagement Models

The following are examples illustrating various community engagement strategies which empower communities and thus can increase community resilience. Elements of these strategies or modified versions of them could be implemented by RCEMHS in partnership with organizations and community members.

Better Bus stops (Appendix C for more information)

Better Bus Stops is a project of Metro Transit. The goal of the project is to enhance access to opportunity by investing in bus stop shelters, lighting, heat and pedestrian access. The project brought community members who are users of the transit system and traditionally under-represented in the decision-making process into the planning, decision-making and implementation of bus stop improvements. This model is an example of a government agency operating on the “Empower” end of the IAP2 Spectrum of Public Participation.

The Better Bus Stops project was intentional to invest money in their community engagement activities. One innovative element was to develop a re-granting program. For the project there was a total of $419,000 devoted to community engagement. Of that, $217,250 was contracted to their established Community Engagement Team to be subcontracted out to community-based organizations. Organizations were then able to use money to develop and implement community engagement tactics appropriate for their communities to provide input and feedback to Metro Transit. Figure 5 illustrates the Better Best Stops Community Engagement Model.

Figure 5: Better Bus Stop Community Engagement Model

Brooklyn Park Community Engagement Initiative (See Appendix D for more information)

In 2009, the City of Brooklyn Park began the Community Engagement Initiative (CEI). The city was experiencing economic hardship along with a dramatically changing population. This initiative was developed to change the way the city engages with residents and address the lack of community in the city. Brooklyn Park is home to the largest Liberian population outside of Liberia. Today, 49% of the population is non-white and 21% of those are foreign-born (Alliance for Innovation, 2012). The city recognized that people of different backgrounds were living next to each other, but not engaging with each other. There was a lack of community connectedness – a primary indicator of community resilience.

The CEI team was intentionally composed of a diverse community of stakeholders to reflect the population of the city. The CEI held a series of Community Cafés in various accessible locations across the city. Over 400 people attended to provide input on what would enhance their quality of life, their opportunities, what characteristics contribute to their quality of life, what detract, and what did they not want to see change as the city planned for its future (Alliance for Innovation, 2012).

Today, there is a community engagement department within the city government and community engagement strategies are used across departments in planning and decision-making. Brooklyn Park's community engagement initiative falls across the "Involve", "Collaborate" and "Empower" areas of the IAP2 Spectrum. Residents were engaged in the planning; decision-making and community engagement has been institutionalized within the city. This is a model which could be used by RCEMHS in collaboration with other city departments to engage communities in identifying their own assets and vulnerabilities.

Nexus Community Partners (See Appendix E for more information)

Nexus is a nonprofit organization which supports strong, equitable and just communities in which all residents are engaged, recognized as leaders and have pathways to opportunities. One of their initiatives is the Community Engagement Institute, which strengthens communities and community leadership through equity-based community engagement.

Nexus has developed a model of community engagement which connects outcomes to authentic community engagement shown in Figure 6 (Nexus Community Partners, 2018). RCEMHS could use this model as a reference point within their community engagement work. This model also aligns with community engagement and equity priorities in the 2018 Ramsey County Strategic Plan.

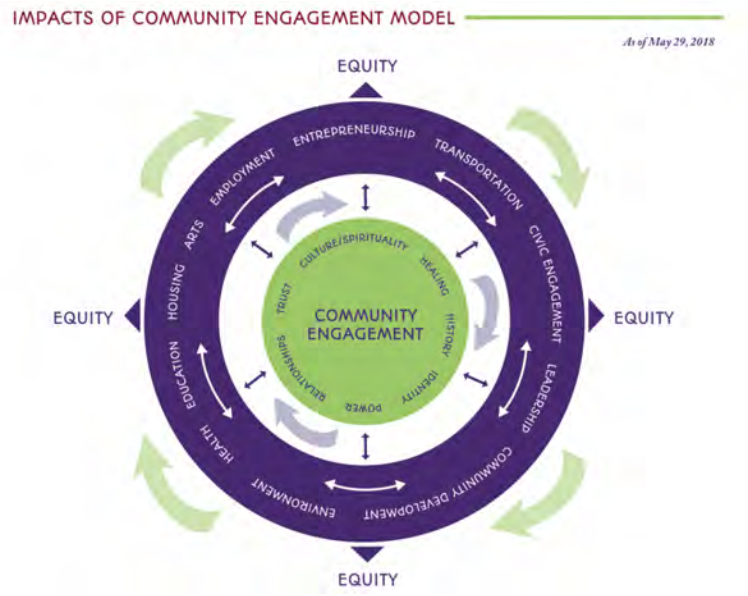


Figure 6: Impacts of Community Engagement Model

Conclusion

Disasters affect everyone, but their consequences do not impact everyone equally. Factors such as network, socioeconomic status, employment, and housing influence how communities respond to those consequences. In a county as diverse and densely-populated as Ramsey, it can be hard to plan a specific outreach and engagement strategy to inform specific communities about disaster preparedness; however, there are similarities between communities

that can inform an effective plan. By prioritizing a human centered approach, RCEMHS can keep the communities at the forefront of their efforts. The models and recommendations provided can be implemented by Ramsey County as well as by or in coordination with emergency management staff of municipalities within the County.

References

Allen, G., Parillo, S. J., Will, J., & Mohr, J. A. (2007). Principles of Disaster Planning for the Pediatric Population. *Prehospital and Disaster Medicine*, *22*(6), 537–540. https://doi.org/doi:10.1017/S1049023X00005392

Alwang, J., Siegel, P. B., & Jorgensen, S. L. (2001). *Vulnerability: a view from different disciplines* (Social Protection and Labor Policy and Technical Notes No. 23304). Retrieved from The World Bank website: https://econpapers.repec.org/paper/wbkhdnspu/23304.htm

Bartenfield, M. T., Peacock, G., & Griese, S. E. (2014). Public Health Emergency Planning for Children in Chemical, Biological, Radiological, and Nuclear (CBRN) Disasters. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, *12*(4). https://doi-org.ezp3.lib.umn.edu/10.1089/bsp.2014.0036

Bason, C. (2017). *Leading Public Design: Discovering Human-Centered Governance*. University of Bristol: Policy Press.

Bharosa, N., Lee, J., & Janssen, M. (2010). Challenges and obstacles in sharing and coordinating information during multi-agency disaster response: Propositions from field exercises. *Information Systems Frontiers*, *12*(1), 49–65. https://doi.org/10.1007/s10796-009-9174-z

Busch, N., & Givens, A. (2013). Achieving Resilience in Disaster Management: The Role of Public-Private Partnerships. *Journal of Strategic Security*, *6*(2). http://dx.doi.org/10.5038/1944-0472.6.2.1

CDC's Social Vulnerability Index. (2018, September 5). Retrieved February 4, 2019, from https://svi.cdc.gov/

Chandra, A. (Ed.). (2011). *Building community resilience to disasters: a way forward to enhance national health security*. Santa Monica, CA: RAND.

City of Brooklyn Park, MN Community Engagement Initiative. (2012, October 2). Retrieved from Alliance for Innovation website: https://www.transformgov.org/articles/city-brooklyn-park-mn-community-engagement-initiative

Crenshaw, K. (2018). Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics [1989]. In K. T. Bartlett & R. Kennedy (Eds.), *Feminist Legal Theory* (1st ed., pp. 57–80; By K. Bartlett). https://doi.org/10.4324/9780429500480-5

Crosby, J. (2018). For many Minnesota seniors, there's no place like home. *Star Tribune*. Retrieved from http://www.startribune.com/for-many-aging-seniors-in-minnesota-there-s-no-place-like-home/501522632/

Convention and Protocol Relating to the Status of Refugees. (1951). Retrieved from https://www.unhcr.org/protection/basic/3b66c2aa10/convention-protocol-relating-status-refugees.html

Cutter, S. L., Ahearn, J. A., Amadei, B., Crawford, P., Eide, E. A., Galloway, Jr., G. E., … Zoback, M. L. (2013). Disaster Resilience: A National Imperative. *Environment Magazine*, (March/April 2013).

Egbert, A. (2014, March). *Demographic changes that are transforming Minnesota and Ramsey County*. PPT presented at the Minnesota State Demographic Center. Retrieved from https://mn.gov/bms-stat/assets/ae-ramsey-co-presentation-march2014-post.pdf

Emergency Management Partnership Examples. (n.d.). 4.

Emergency Management & Homeland Security. (2019). Retrieved from Emergency Management & Homeland Security website: https://www.ramseycounty.us/your-government/departments/safety-and-justice/emergency-management-homeland-security

Fairfax County | Emergency Management. (n.d.). Retrieved April 3, 2019, from https://www.fairfaxcounty.gov/emergencymanagement/what-do-we-do

Flanagan, B. E., Gregory, E. W., Hallisey, E. J., Heitgerd, J. L., & Lewis, B. (2011). A Social Vulnerability Index for Disaster Management. *Journal of Homeland Security and Emergency Management*, *8*(1). https://doi.org/10.2202/1547-7355.1792

FEMA. (2013). *Building Better Resiliency -- Together*. 2.

Fox-Grage, W., & Ujvari, K. (2014). *Older Americans Act*. Retrieved from AARP Public Policy Institute website: https://www.aarp.org/content/dam/aarp/research/public_policy_institute/health/2014/the-older-americans-act-AARP-ppi-health.pdf

Gausche-Hill, M. (2009). Pediatric Disaster Preparedness: Are We Really Prepared? *The Journal of Trauma: Injury, Infection, and Critical Care*, *67*(2), S73–S76. https://doi.org/10.1097/TA.0b013e3181af2fff

Goldman, L., Finkelstein, R., Schafer, P., & Pugh, T. (2014). *Resilient Communities: Empowering Older Adults in Disasters and Daily Life*. Retrieved from The New York Academy of Medicine website: http://nyam.org/publications/publication/resilient-communities-empowering-older-adults-in/

Guzman, S., Viveiros, J., & Salomon, E. (2017). *Housing Policy Solutions to Support Aging with Options*. 9.

Harper, S. G. (2016). Keystone characteristics that support cultural resilience in Karen refugee parents. *Cultural Studies of Science Education*, *11*(4), 1029–1060. https://doi.org/10.1007/s11422-015-9681-9

Harper, S. G. (2017). Engaging Karen refugee students in science learning through a cross-cultural learning community. *International Journal of Science Education*, *39*(3), 358–376. https://doi.org/10.1080/09500693.2017.1283547

Incident Command System Resources | FEMA.gov. (2018). Retrieved April 3, 2019, from https://www.fema.gov/incident-command-system-resources

Izadkhah, Y. O., & Hosseini, M. (2005). Towards resilient communities in developing countries through education of children for disaster preparedness. *Int. J. Emergency Management Int. J. Emergency Management*, *2*, 138–148. https://doi.org/10.1504/IJEM.2005.007355

Janssen, M., Lee, J., Bharosa, N., & Cresswell, A. (2010). Advances in multi-agency disaster management: Key elements in disaster research. *Information Systems Frontiers*, *12*(1), 1–7. https://doi.org/10.1007/s10796-009-9176-x

John, D., & Koenig, G. (2015). *Fact Sheet Minnesota: Workplace Retirement Plans Will Help Workers Build Economic Security* (p. 2) [Fact Sheet]. Retrieved from AARP website: https://www.aarp.org/content/dam/aarp/ppi/2015-07/AARP-Minnesota-state-fact-sheet.pdf

Karen History. (n.d.). Retrieved April 23, 2019, from Karen Organization of Minnesota website: https://www.mnkaren.org/history-culture/karen-history/

Kapucu, N. (2006). Public-Nonprofit Partnerships for Collective Action in Dynamic Contexts of Emergencies. *Public Administration*, *84*(1), 205–220.

McCleary, J., Horn, T., Toe, P. W., Dwee, E., & Sniffen, S. (2018). The Karen Chemical Dependency Collaboration: Lessons Learned in Using a Collaborative Framework to Promote Refugee Integration. *Advances in Social Work*, *18*(3), 911–929. https://doi.org/10.18060/21654

Middleton, K. R., & Burt, C. W. (2006). Availability of pediatric services and equipment in emergency departments: United States, 2002-03. *Advance Data*, (367), 1–16.

Minnesota Board on Aging. (2016). *2015 Survey of Older Minnesotans Caregiving Issue Brief* (p. 10). Retrieved from http://www.mnaging.net/en/Advisor/~/media/Caregiving_Issue_Brief_w_Cover_Page_4_16.ashx

Mitchell, T., Haynes, K., Hall, N., Choong, W., & Oven, K. (2008). The Roles of Children and Youth in Communicating Disaster Risk. *Children, Youth and Environments*, *18*(1), 254–279.

Mitschke, D. B., Mitschke, A. E., Slater, H. M., & Teboh, C. (2011). Uncovering Health and Wellness Needs of Recently Resettled Karen Refugees from Burma. *Journal of Human Behavior in the Social Environment*, *21*(5), 490–501. https://doi.org/10.1080/10911359.2011.566466

Morrow, B. H. (1999). Identifying and Mapping Community Vulnerability. *Disasters*, *23*(1), 1–18.

Nexus Community Partners. (2018). *Impacts of Community Engagement Model*. Retrieved from https://www.nexuscp.org/wp-content/uploads/2017/05/ImpactsofCEGraphic_5-30-18.pdf

Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. *American Journal of Community Psychology*, *41*(1–2), 127–150. https://doi.org/10.1007/s10464-007-9156-6

Nowell, B., Steelman, T., Velez, A.-L. K., & Yang, Z. (2017). The Structure of Effective Governance of Disaster Response Networks: Insights From the Field. *American Review of Public Administration*, *48*(7). https://doi.org/10.1177/0275074017724225

Pandey, B., & Okazaki, K. (2012). *Community Based Disaster Management: Empowering Communities to Cope with Disaster Risks*. Retrieved from United Nations Centre for Regional Development, Japan website: https://pdfs.semanticscholar.org/b76c/55e5d2b32d900aa765e4aefe01540ba6cffa.pdf

Penrose, A., & Takaki, M. (2006). Children's rights in emergencies and disasters. *Lancet*, *367*, 698–99.

Plough, A., Fielding, J. E., Chandra, A., Williams, M., Eisenman, D., Wells, K. B., … Magaña, A. (2013). Building Community Disaster Resilience: Perspectives From a Large Urban County Department of Public Health. *American Journal of Public Health*, *103*(7), 1190–1197. https://doi.org/10.2105/AJPH.2013.301268

Public Private Partnerships | Fairfax County. (n.d.). Retrieved April 3, 2019, from https://www.fairfaxcounty.gov/public-private-partnerships

Public-Private Partnerships for Emergency Preparedness: Developing Partnerships. (2014). Retrieved from https://careersingovernment.com/tools/gov-talk/about-gov/public-private-partnerships-emergency-management-perspective/

Ramsey County, MN. (n.d.). Retrieved April 8, 2019, from Data USA website: https://datausa.io/profile/geo/ramsey-county-mn/#demographics

Ramsey County Emergency Operations Plan. (2017, May).

RC 1 Building Community Resilience to Emergencies n Vulnerable Populations. (n.d.).

Rygel, L., O'sullivan, D., & Yarnal, B. (2006). A Method for Constructing a Social Vulnerability Index: An Application to Hurricane Storm Surges in a Developed Country. *Mitigation and Adaptation Strategies for Global Change*, *11*(3), 741–764. https://doi.org/10.1007/s11027-006-0265-6

Siambabala Bernard Manyena. (2006). The Concept of Resilience Revisited. *Disasters*, *30*(4), 433–450.

Smolen, L. A., Zhang, W., & Detwiler, S. (2013). Engaged Teaching and Learning With Adult Karen Refugees in a Service-Learning Site. *TESOL Journal*, *4*(3), 534–554. https://doi.org/10.1002/tesj.94

Spivey, S. E., & Lewis, D. C. (2016). Harvesting from a Repotted Plant: A Qualitative Study of Karen Refugees' Resettlement and Foodways. *Journal of Refugee Studies*, *29*(1), 60–81. https://doi.org/10.1093/jrs/fev013

Steigenberger, N. (2016). Organizing for the Big One: A Review of Case Studies and a Research Agenda for Multi-Agency Disaster Response. *Journal of Contingencies & Crisis Management*, *24*(2), 60–72. https://doi.org/10.1111/1468-5973.12106

Tschimmel, K. (n.d.). *Design Thinking as an effective toolkit for innovation*. Presented at the Proceedings of the XXIII ISPIM Conference: Action for Innovation: Innovating from Experience, Barcelona. Retrieved from http://www.idmais.org/pubs/KatjaTschimmel/2012/actas_internacionais%20c%F3pia/2012.4.ISPIM.KatjaTschimmel1.pdf

What is the Spectrum of Public Participation? (2017, February 13). Retrieved March 30, 2019, from Sustaining Community website: https://sustainingcommunity.wordpress.com/2017/02/14/spectrum-of-public-participation/

Wolfe, J. (2017). *Healthy Aging: A Public Health Framework* (p. 29). Retrieved from Ramsey County Public Health website: https://www.ramseycounty.us/sites/default/files/Departments/Public%20Health/Healthy_Aging_A_Public_Health_Framework_SPRCPH.pdf

Yarris, K. E., Stasiun, J. C., Musigdilok, V. V., & Win, C. C. (2015). Generation, Displacement, and Deservedness among Karen Refugees in California. *International Migration*, *53*(3), 111–123. https://doi.org/10.1111/imig.12167

Youngblood, S. A., & Youngblood, N. E. (2018). Usability, content, and connections: How county-level Alabama emergency management agencies communicate with their online public. *Government Information Quarterly*, *35*(1), 50–60. https://doi.org/10.1016/j.giq.2017.12.001

Appendices

Appendix A: Interview Protocol and Questions

Appendix B: Nexus Community Partners Community Assessment Tool

Appendix C: Metro Transit Better Bus Stops

Appendix D: Brooklyn Park Community Engagement Guide & Initiative

Appendix E: Nexus Community Partners Model for Community Engagement

Appendix A: Interview Protocol and Questions

Protocol

Thank you for agreeing to participate in this research project. We are conducting interviews as a part of our Master's capstone project with the Humphrey School of Public Affairs. The project is with Ramsey County Emergency Management & Homeland Security (RCEMHS). This project will assist Ramsey County in identifying social vulnerabilities and assets within targeted demographic groups to better prepare for, respond to, and build resilience against natural or man-made disasters. We are doing exploratory research including interviews with organizations, government agencies and community members. This interview should take no more than an hour. I can provide you contact information if you have any questions or would like more information about the research. Nothing you say will be directly attributed to you. Do you have any questions before we begin?

Nonprofit Organization Interview Questions

1. What is your relationship/position in the community? (Describe your work with the community)

2. What resources or strengths does the community (or your organization) have to help respond to a man-made/natural disaster? What are the barriers? Are there places where community members tend to gather/community networks? (Prompt resources can mean social i.e. networks, people generally help each other, strong feeling of connectedness or material i.e. faith-based orgs, accessible transportation)

3. What are the characteristics that make this community vulnerable to the impacts of a disaster?

4. How do you communicate with clients/those receiving services/community members? What outreach methods have worked for you?

5. What kind of interaction does your organization have with Ramsey County?

6. What information has your organization received on disaster/emergency preparedness? Who has delivered the information (another organization, government)?
    a. What strengths or resources does your organization have to help the people you serve to prepare and recover from a disaster?

7. Is there anyone else you recommend us talking to?

Community Members Interview Questions

1. Are there common gathering spaces in your community? For example, churches, community centers, etc.

2. What do you believe are characteristics that make communities vulnerable to the impacts of a disaster?

3. What do you believe are characteristics that make communities be better able to mitigate and/or recover from a disaster?
    a. What type of information is needed to help people be prepared/what would be most helpful?

4. Where do you receive your information, news, etc…?

5. What kind of interaction has your organization had with Ramsey County, if at all?

6. Are there any strategies you have to prepare or respond to a disaster? For example, do you have a plan for losing your home to a disaster? Where did you hear about/learn of that strategy?

7. Is there anyone else you recommend us talking to?

<u>Gov't Agency Interview Questions</u>

1. Can you talk about your relationship with the Ramsey County Emergency & Management? (Prompt: Do you collaborate on programs or initiatives, what is your department's role when an emergency or disaster happens?)

2. How do you collaborate with other departments to provide services to communities? Within the work you do, do you see areas where there may be natural intersection points to collaborate with Emergency Services around preparing people? Where are there barriers?

3. What are you doing for community outreach?
    a. (Can follow with) In your experience, what challenges have you encountered in community outreach? What works well?

4. Has your department had any interaction with the elderly (60+), young children (under 5), and/or the Karen population? How did you communicate with these groups?
    a. What do you observe are assets within the XXX community (structural and social capital) that could be of benefit in preparing and mitigating a disaster?
    b. What do you observe are vulnerabilities within the XXX community (structural and social capital) that could hinder the ability for communities to be prepared for a disaster?

5. Are you aware of any outreach that takes place to educate vulnerable populations (elders, ethnic communities) on disaster preparedness?
    a. Prompt: What are common and/or effective communication strategies that are currently used to connect with XXXX population? Where do people get their information from?

6. Is there anyone else you recommend us talking to?

WWW.NEXUSCP.ORG/NCEI

Contact: Avi Viswanathan, aviswanathan@nexuscp.org or Angie Brown, abrown@nexuscp.org

COMMUNITY ENGAGEMENT ASSESSMENT TOOL

We encourage you to share your feedback with us and tell us how you are using the tool or resource. Nexus Community Engagement Institute and our partners intend these documents and tools to introduce practitioners, funders, evaluators, and community members to community engagement and to give the field clarity in its language and principles. However, community engagement is not a field that can rely on written materials alone; it takes a community of practitioners to support one another in practicing community engagement effectively, meeting its challenges, and tapping the strengths within each unique context. We encourage you to seek out experienced practitioners to support you in implementing these tools, principles, and concepts.

Nexus Community Engagement Institute is available for consultation. Please contact us at www.nexuscp.org/ncei or email program director Avi Viswanathan at aviswanathan@nexuscp.org.

Nexus Community Engagement Institute is continuing the work of the Building the Field of Community Engagement (BTF) collaborative. The BTF collaborative was a partnership between Casa de Esperanza, the Cultural Wellness Center, Hope Community, Lyndale Neighborhood Association, the Native American Community Development Institute, and Nexus Community Partners.

INSTRUCTIONS FOR USING THE COMMUNITY ENGAGEMENT ASSESSMENT TOOL

EVERY ORGANIZATION HAS THE CAPACITY TO DO COMMUNITY ENGAGEMENT. Resource limitations can impact the ability to do this work, but commitment and creativity are the only real requirements. We encourage you to use this assessment tool without judgment of yourself or others within your organization. We offer the tool as a guide to help ourselves and our fellow practitioners grow in our understanding of community engagement and to be thoughtful about our own practice of engagement techniques.

THERE ARE MANY WAYS PRACTITIONERS AND ORGANIZATIONS CAN USE THIS TOOL:

- As an individual, to assess your strengths and areas for professional growth
- With the staff in your organization to see where there is agreement, disagreement or tensions about your community engagement efforts.
- With board members to begin or deepen a conversation about community engagement within your organization.
- With new staff or board members to assess what skills they can contribute to your efforts to engage your community.
- To assess where an external partnership could improve community engagement by closing a gap posed by the limitations of your organization.
- To identify where staff or board members require new knowledge or training.
- To glean lessons learned after an event, project or initiative.
- With potential partners (government agencies, nonprofits, community institutions, etc.) to assess whether your approaches are complementary.
- With community members, to assess how they see your work.

SELF-ASSESSMENT INSTRUCTIONS:

1. Under each question on pages 3-5 are a set of continua to rank your work from **"DOING PRIMARILY OUTREACH" through "DOING CE"**.
2. **Put a check mark in the box** you believe best reflects where you or your organization is currently at. You may want to consider 1-2 examples to demonstrate why you selected that box.
3. If you are having trouble deciding which applies, it **may be helpful to consider how you think the community would describe your work**, rather than how you internally describe the work.
4. **Below is a key** to help decipher which column to select in each row.

SELF-ASSESSMENT KEY: "CE" = COMMUNITY ENGAGEMENT

- **UNSURE WHICH WE ARE DOING:** Select this column if you don't know whether you work is outreach, community engagement, or in a stage somewhere in between.
- **DOING PRIMARILY OUTREACH:** Select this column if most often you believe your work is mostly outreach rather than mostly community engagement.
- **BEGINNING TO TALK ABOUT MOVING TO CE:** Select this column if you or others in your organization have begun seriously discussing an interest in or commitment to incorporating community engagement practices and principles, but have yet to implement any strategies or policies to do so.
- **WORKING TOWARD CE:** Select this column if you or your organization have begun to implement some community engagement practices, but your organization/team has yet to formally adopt community engagement principles to be at the core and forefront of all the work you do.
- **DOING CE:** Select this column if the vast majority of the time you or your organization are doing community engagement and have formally created systems and practices to continually learn and adapt through community engagement.

COMMUNITY ENGAGEMENT ASSESSMENT TOOL

Q: WHAT KIND OF RELATIONSHIP DO YOU HAVE WITH COMMUNITY MEMBERS?

OUTREACH	UNSURE WHICH WE ARE DOING	DOING PRIMARILY OUTREACH	BEGINNING TO TALK ABOUT MOVING TO CE	WORKING TOWARD CE	DOING CE	COMMUNITY ENGAGEMENT
• Relationships are primarily **TRANSACTIONAL,** for the purpose of completing a project.						• Relationships are **FOUNDATIONAL,** continually built between and among people and groups. Staff/institutions continually build the relationships they need to know their community.
• Relationships are often **NOT INCLUSIVE** of all racial or cultural groups in the community.						• Relationships reflect the **DIVERSITY** within the community.
• Relationships can be **LIMITED** to a few community members, often giving influence to those with the loudest voices.						• Relationships are built not just with current leaders, but also with people with an interest and/or **POTENTIAL TO BE LEADERS.**
• Relationships are **SHORT-TERM,** so staff have to rebuild them as other projects or issues come up.						• Relationships are transformational and **LONG-TERM,** so community leaders/members can engage in projects and issues as they come up.

Q: WHY ARE YOU ENGAGING PEOPLE?

OUTREACH	UNSURE WHICH WE ARE DOING	DOING PRIMARILY OUTREACH	BEGINNING TO TALK ABOUT MOVING TO CE	WORKING TOWARD CE	DOING CE	COMMUNITY ENGAGEMENT
• To accomplish a project or a **SPECIFIC GOAL** defined by the organization.						• To create space for people to **CONNECT, RAISE CONCERNS, BUILD POWER** and **ACT IN THEIR OWN INTERESTS.**
• To **SEEK BUY-IN OR APPROVAL** of something the organization has already planned.						• To **CREATE SPACE** for the community's assets to be recognized and utilized.

COMMUNITY ENGAGEMENT ASSESSMENT TOOL

Q: HOW ARE YOU GETTING PEOPLE INVOLVED? WHEN?						
OUTREACH	UNSURE WHICH WE ARE DOING	DOING PRIMARILY OUTREACH	BEGINNING TO TALK ABOUT MOVING TO CE	WORKING TOWARD CE	DOING CE	COMMUNITY ENGAGEMENT
• Primary activities with community include **FLYERING, SURVEYS, FOCUS GROUPS, WORKSHOPS,** etc.						• Primary activities with community include **LISTENING SESSIONS, ONE-TO-ONE MEETINGS, CELEBRATIONS, LEADERSHIP DEVELOPMENT, COMMUNITY-BUILDING PROJECTS,** etc.
• Information is given or feedback is requested **AFTER A PROJECT IS PLANNED.**						• Planning is done **WITH THE COMMUNITY** from the beginning

Q: HOW DO IDEAS GET GENERATED?						
OUTREACH	UNSURE WHICH WE ARE DOING	DOING PRIMARILY OUTREACH	BEGINNING TO TALK ABOUT MOVING TO CE	WORKING TOWARD CE	DOING CE	COMMUNITY ENGAGEMENT
• **STAFF/ INSTITUTIONS GENERATE IDEAS** they think the community will support.						• Staff/institutions **SUPPORT COMMUNITY MEMBERS** in generating their own ideas.
• Staff/institutions generate **SOLUTIONS TO A PROBLEM** they have defined.						• Staff/institutions engage in **CONTINUAL SELF-REFLECTION** to respond to and incorporate people's ideas, feedback, talents, and challenges into the work.

COMMUNITY ENGAGEMENT ASSESSMENT TOOL

Q: HOW DO YOUR ORGANIZATIONAL POLICIES AND STRUCTURES SUPPORT ENGAGEMENT?

OUTREACH	UNSURE WHICH WE ARE DOING	DOING PRIMARILY OUTREACH	BEGINNING TO TALK ABOUT MOVING TO CE	WORKING TOWARD CE	DOING CE	COMMUNITY ENGAGEMENT
• The organizational culture is primarily focused on **OBTAINING SPECIFIC OUTCOMES.**						• The organizational culture is focused on learning and it values **EMERGENT AND LONG-TERM OUTCOMES.**
• Board and staff may **NOT REPRESENT** the community.						• Board and staff **REFLECT** the community.
• The organization **ADHERES TO WAYS OF OPERATING** that reflect the **DOMINANT CULTURE,** such as using Robert's Rules for meetings, prioritizing staff to speak, etc.						• The organization **CREATES SPACE FOR DIFFERENT CULTURAL WAYS,** such as offering cultural foods and social spaces/ times, giving elders a special role, etc.
• Racism and power may not be discussed or may be **DEALT WITH SUPERFICIALLY.**						• The organizational culture supports discussions to **UNDERSTAND AND DISMANTLE** structural racism, to help heal historical trauma and to claim individual and community power.
• The organization adheres to **ORGANIZATION-DRIVEN** policies and structures.						• The organization demonstrates a willingness to revisit organizational policies and structures to **RESPOND TO COMMUNITY NEEDS AND IDEAS.**

COMMUNITY ENGAGEMENT ASSESSMENT TOOL

QUESTIONS TO ASK YOURSELF OR DISCUSS AS A GROUP AFTER COMPLETING YOUR ASSESSMENT:

- Why did you rank yourself or your organization as you did?
- Where do differences exist between your individual work and the overall work of the organization?
- What would you and/or your organization like to do differently?
- Do your responses align with your organization's mission? What changes could advance your mission?
- Where does the staff or board of the organization agree? Disagree? Where is there tension?
- Where does your organization need additional support?
- Where do you need to build the capacity of your organization?
- What are the opportunities for and challenges to doing community engagement?

Metro Transit

BETTER BUS STOPS

Community Engagement

What is Better Bus Stops?

A project to enhance access to opportunity by investing in bus stop shelters, lighting, heat and pedestrian access.

"Our front porch to our customers is the bus stop. That's where we present ourselves to our customers really for the first time."
– Brian Lamb, Metro Transit General Manager

A community engagement process, active from March 2016 – March 2017, based in areas of concentrated poverty where more than half of the residents are people of color.

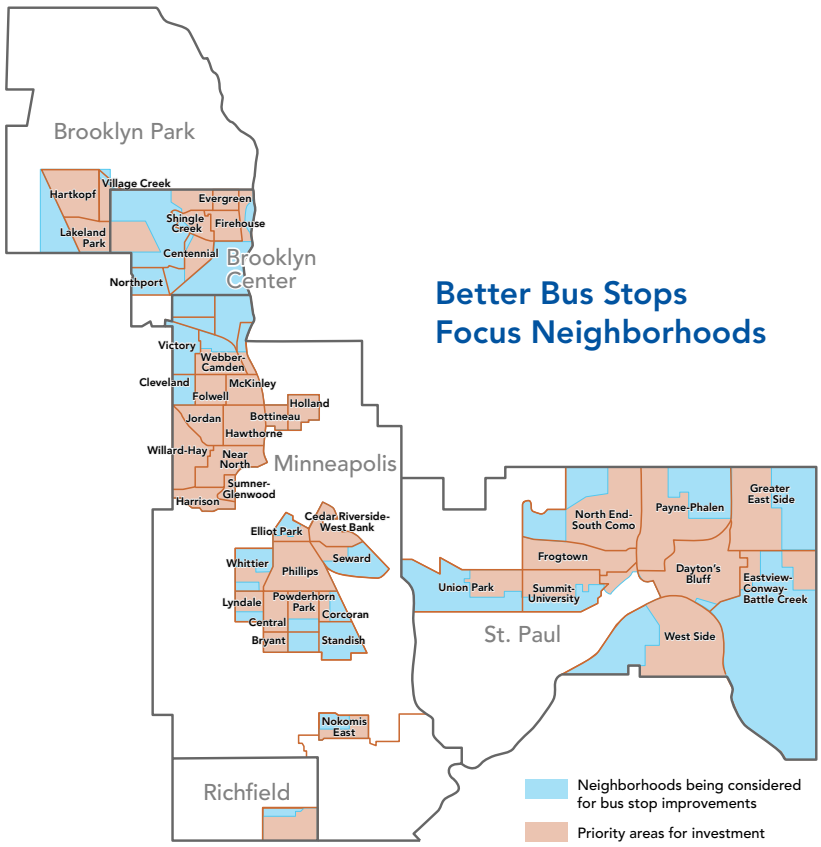
Why focus on community engagement?

To bring the community into the planning, decision-making and implementation of bus stop improvements and to influence the criteria the agency uses to prioritize shelter investments.

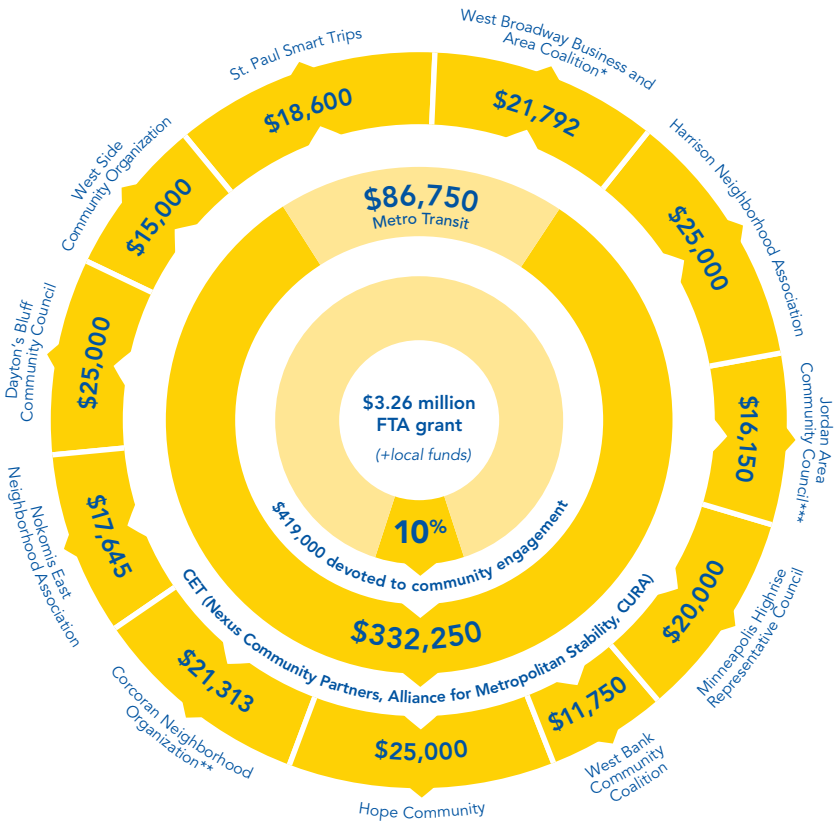
"Community engagement isn't something you check off. It really is the day in and the day out of being visible, asking good questions, and the follow up."
– Community Organization

"The data's important but when you can align that with lived experience, lived outcomes, you get much better informed decision-making."
– Community Engagement Team

Better Bus Stops Focus Neighborhoods



Community Engagement Budget



* *partnered with Juxtaposition Arts*

** *partnered with Central Area Neighborhood Development Organization, Lyndale Neighborhood Association, Lake Street Council*

*** *partnered with Hawthorne Neighborhood Council*

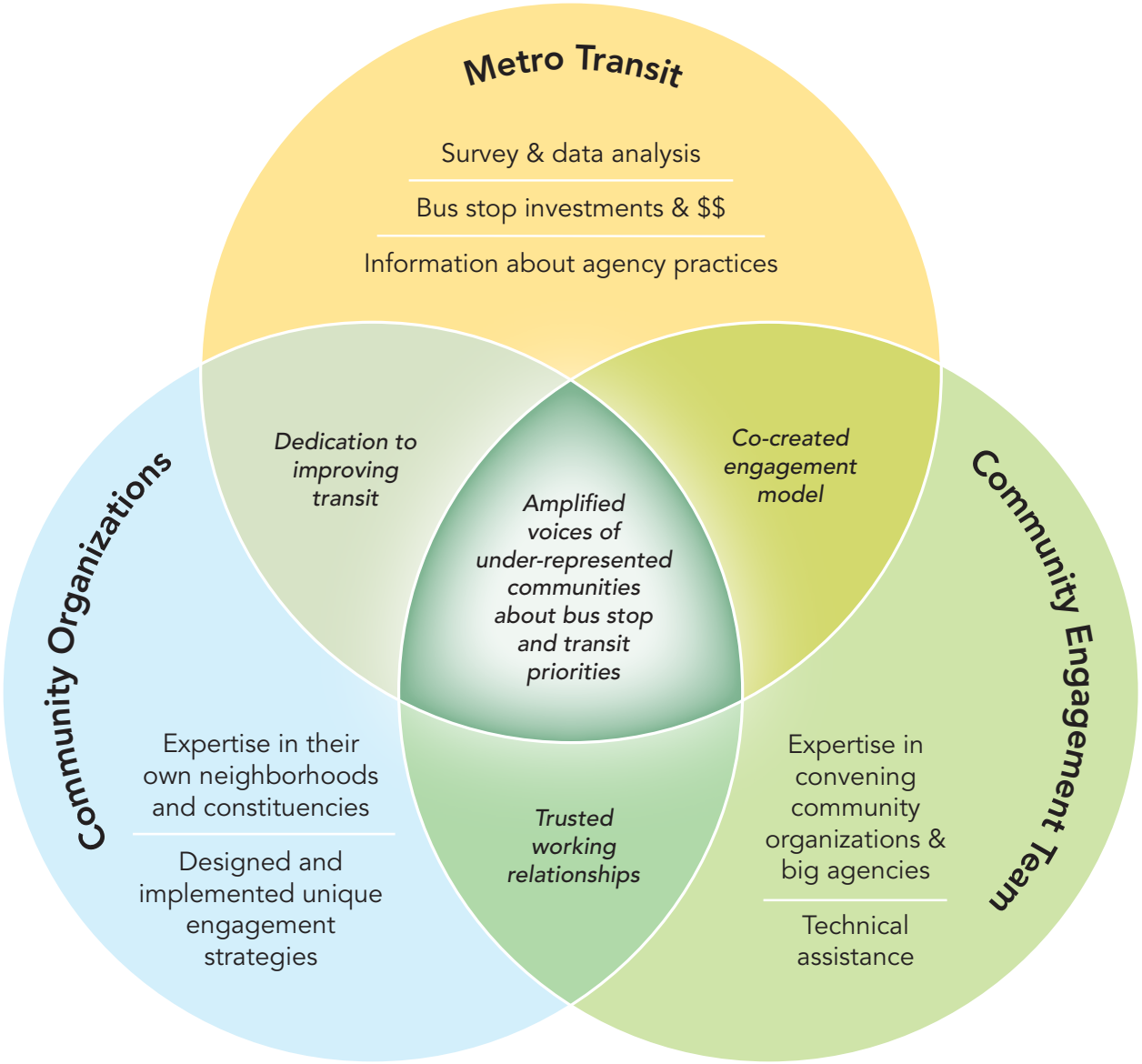
$419,000 devoted to community engagement

$86,750
kept for Metro Transit, to do more traditional engagement and to provide engagement coverage for the entire Metro Transit service area (including a public engagement plan)

$332,250
contracted to the CET (Nexus Community Partners, Alliance for Metropolitan Stability, CURA), with $217,250 subcontracted out to community-based organizations

"All the players 'at the table' were paid to be there, rather than paid professional staff and volunteer community members. This created the conditions for leadership development and community ownership of the process – which ultimately yielded high quality results."
– Metro Transit staff

Community Engagement Model



"Co-creation of this model with the CET involved Metro Transit giving up decision-making power in several ways, which was essential in creating the conditions and space for community leadership and ownership of the work and outcomes.

Examples of this include who and how community engagement subcontracts were awarded, along with empowering community organizations to build off their expertise and create their own customized engagement plans for their constituencies."

– Metro Transit staff

Community Engagement Numbers

An estimated **7,000 people** participated in community engagement

2,013 Metro Transit surveys completed
+ 2,230 surveys customized by community organizations

Nearly 200 community engagement events

About the CET

Community Engagement Team (CET) is comprised of Nexus Community Partners, the Alliance for Metropolitan Stability and Center for Urban and Regional Affairs at the University of Minnesota. The CET's work is focused on supporting low-wealth populations, indigenous communities, communities of color, new immigrants and people with disabilities.

> *"That traditionally underrepresented communities are well represented in the survey is just one measure of the value brought by community organizations. They successfully brought the survey to their communities, and used their relationships in the community to have conversations in ways that would not have been possible had Metro Transit staff or transit consultants initiated the conversation."*
>
> *– Metro Transit staff*

Subcontracted Community Organizations

- West Broadway Business and Area Coalition with Juxtaposition Arts
- Harrison Neighborhood Association
- Jordan Area Community Council with Hawthorne Neighborhood Council
- Minneapolis Highrise Representative Council
- West Bank Community Coalition
- Hope Community
- Corcoran Neighborhood Organization with Central Area Neighborhood Development Organization, Lyndale Neighborhood Association and Lake Street Council
- Nokomis East Neighborhood Association
- St. Paul Smart Trips
- West Side Community Organization
- Dayton's Bluff Community Council

What did we learn?

PRIORITIES FOR
WHERE TO LOCATE SHELTERS:

- Where many people wait for the bus.
- Near hospitals, healthcare clinics, social service centers, senior housing, housing and services for people with disabilities, where children are waiting.
- Where residents don't have a car, where residents have lower income.

"Even though ridership may not be as high, shelters are needed near senior housing."
– Survey participant

PRIORITIES FOR
SHELTER AND BUS STOP FEATURES:

- Signage and information
- Benches
- Shelters
- Lighting
- Heaters
- Safe street crossings
- Maintenance at bus stops and shelters

"Bus shelters with lighting, heat, benches and maps are extremely helpful to those of us who rely on transit."
– Survey participant

PRIORITIES FOR
SHELTER STYLE AND BUS STOP DESIGN:

- A safe path to the bus stop, and safe environment at the bus stop
- Design for all ages and abilities
- Better weather protection

"Wider sidewalks are a must. Too often I can't be visible to flag the bus without being dangerously close to fast driving automobile traffic. When I have a toddler with me I'm 10 times more anxious doing this."
– Survey participant

PRIORITIES
BEYOND BUS STOPS:

- Bus service and operations
- Equitable distribution of resources
- Fares
- Safety

"When buses run late or too early, peoples' livelihoods are at stake." – Community Organization

"[The bus system] has helped my family to attend doctor appointments, grocery stores when there are no other options. It helps us survive."
– Survey participant

"Some people actually don't have cars ... and they rely on the light rail and the bus every day they wake up." – Community Organization

"Safety must be addressed through an equity lens because of the different ways that safety shapes and defines bus riders' experiences depending on their location, identity and other factors. We heard from the majority of subcontractors that safety was a top concern for their community members when using transit. The diversity of comments and suggestions on this topic show that safety is defined and addressed differently in every community." – CET




Community engagement accomplishments

- Engaging and centering the people and communities who are traditionally under-represented in transit decision-making, but are most affected by these decisions.
- Engaging the community in discussions focusing on equity and policy surrounding the investment of resources at the bus stop level to influence the criteria the agency uses to prioritize bus stops improvements.
- Fostering greater transparency on Metro Transit decision-making and providing more information about bus stop improvements.
- Creating opportunities to build capacity within the community on transit issues, by compensating community organizations as full partners.
- Documenting and sharing lessons learned from this model of community engagement.

"[As a result of the Better Bus Stops project] we have closer relationships with individuals from Metro Transit itself, the Metropolitan Council, and from various neighborhood groups…"

– Community Organization

"A major success is that residents in the community feel that we are doing something positive by being out there in the streets engaging with them. We have heard comments such as 'It's nice to see people wanting to do something positive in the neighborhood,' multiple times from the community."

– Community Organization

For more information, the Better Bus Stops Community Engagement Final Report and video, visit the Better Bus Stops website at metrotransit.org/better-bus-stops.

Metro Transit

06-115-03-17

Community Engagement Planning Guide

Working toward engaging the Brooklyn Park community in an authentic, equitable and meaningful way

Developed by Lidiya Girma, Neighborhood Relations Specialist, lidiya.girma@brooklynpark.org

About this guide

This guide serves as a resource to help staff think through the process of developing a community engagement (i.e. public outreach and participation) plan for City projects (policies, programs, infrastructure development, construction work, etc.) by providing questions and key points for consideration.

What is an engagement plan?

An engagement plan outlines a set of specific outreach and public participation strategies with assigned roles and a timeline for new or reoccurring projects that will impact the community either at the neighborhood or citywide level.

The Community Engagement team can help!

The Community Engagement (CE) team exists to assist all City departments and divisions develop and carry out effective community engagement strategies. Use this resource! Work through the questions outlined in this guide with one or more members of the team.

Step 1: do we need to engage the community?

How do we know if our project needs to incorporate some level of community engagement?

Yes	No	Does our project have potential environmental, economic, safety and/or health impacts on the community?
Yes	No	Have community members voiced interest, concerns or opposition to our project?
Yes	No	Would public participation help our project achieve equitable outcomes for our community members?
Yes	No	Will we be asking the community to provide additional funding for our project (i.e. assessment, tax increase, bond referendum, etc.)?

If the answer to at least one of the above questions is a yes, then contact the CE team. Let's create a plan!

Step 2: what we know and don't know about our project

Before we begin developing public outreach and participation strategies, let's think through what we know about our project. Skip the questions that do not apply.

Questions to consider

- What does our project seek to do for the community?
- What are the anticipated impacts (both positive and negative) at the neighborhood level? What about at the citywide level?
- What is the current level of community awareness about our project and its impact?
- What have our community engagement efforts looked like in the past for this or similar projects? Were they effective or ineffective?
- What are the possible consequences/outcomes (if any) of not engaging the community?
- How can our project timeline accommodate a community engagement process?
- What information is missing? What is still unknown about our project (i.e. funding, timeline, etc.)?

Step 3: identifying who to engage

Depending on the nature of our project, we will want to develop an understanding of either or both of the following:

- Relationship between the level of project impact community stakeholders experience and their current level of engagement (awareness and involvement) with our project or the City more generally (see illustration 1).
- Relationship between the impacted community stakeholders' influence on project outcomes and their current level of engagement with out project (see illustration 2).

Questions to consider

- Which specific community members/groups will be most impacted by our project?
  - Which groups are already engaged? Which are currently disengaged?
  - Which groups have a high influence on project outcomes? Which groups do we need to empower to have greater influence?
  - Which groups are easy for us to reach? Which are difficult for us to reach?
  - With which groups do we already have built relationships? With which groups do we need to begin developing connections?
- From the impacted community members/groups we identified, which need to be:
  - Provided printed and electronic information about our project?
  - Invited to give input and feedback on one or more aspects of our project?
  - Invited to help shape and/or carry out the community engagement effort?
  - Included in the development and decision making process of our project?
- Which City departments and external partner organizations should we collaborate with for our community engagement efforts to be successful?

Illustration 1

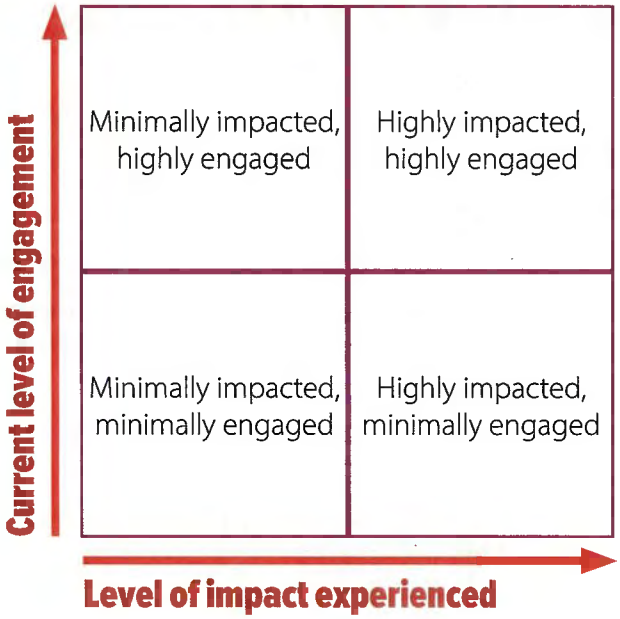
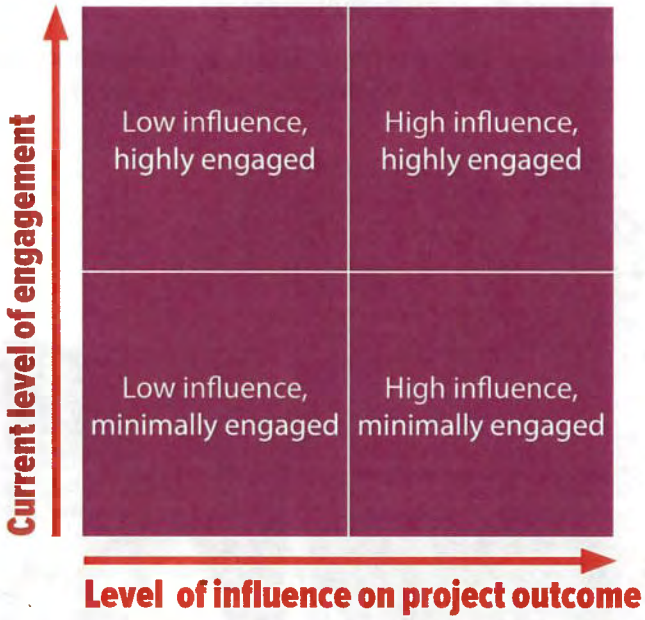


Illustration 2



Step 4: choosing the right community engagement strategies

Our engagement strategies should seek to be dynamic, adaptive and responsive to resident needs and circumstances.

Barriers, challenges and opportunities

- There are transportation, language, technological, institutional and physical barriers that limit access to information and active engagement for socioeconomically disadvantaged populations, community members with disabilities, youth, the elderly, and communities of color.
- We have a culturally and racially diverse community that requires varying methods of information sharing and engagement opportunities. One strategy does not work for all.
- We can leverage existing relationships with community members/groups to reach out to and build new relationships with disengaged and under represented populations.

Setting expectations

We should strive to be transparent about the level of influence and control community members can exercise through their input and involvement on a city project. Set realistic expectations to prevent disappointment and frustration.

IAP2: Spectrum of Public Participation

Questions to consider

- Which communication outlets should we use? Will these outlets reach the intended community members/groups?
- For public meetings/gatherings, which physical locations/spaces (both indoor and outdoor) will be the most convenient/accessible for community members?
- For in-person outreach, during which times and days of the week will we be best able to reach the intended community groups?
- How will we make sure our engagement efforts are equitable? How can we limit barriers to public participation?

Step 5: what does success look like?

Assessing our efforts is an integral part of improving our outreach and engagement strategies. It helps us to understand what we are doing well and how we can improve. It also keeps us accountable to our selves and the community.

Questions to consider before the project starts

- If our community outreach and engagement efforts are successful, what outcomes will we see?
- What are the specific goals and objectives of our outreach and public participation efforts?
- What are some indicators (what we can see and measure) that let us know that we have achieved our engagement goals?

Assessing our efforts after the project is done

- Based on the goals we set for our outreach efforts at the beginning of this project, which did we meet and which did we not meet?
- For the goals we met, what helped us accomplish them?
- For the goals we did not meet, what could we have done better?

Community Engagement Initiative

Best Practices and Recommendations

Brooklyn Park

Background

The City of Brooklyn Park was hit particularly hard by the recession, experiencing high rates of foreclosures, increased poverty, and decreased economic opportunity. The city was also experiencing a rapid demographic shift, as the proportion of residents identifying as white fell from 70% in 2000 to only 51% in 2010.

In December of 2009, Brooklyn Park began a five-year Community Engagement Initiative (CEI), bringing together community members, volunteers, and city staff to change the way that the City engages with residents.

After holding a series of Community Cafés to learn from the community about the issues that are important to them, a core planning team was formed to set a direction for the new initiative. This team of residents, community leaders, and city staff created the strategic goals and structure that guided the initiative, and a new mission statement for the city.

Today the Community Engagement Department is an established part of city government, and departments across the city utilize community engagement in their planning and decision-making. CEI has had a lasting impact in Brooklyn Park through the events, organizations, and partnerships it began, and through the resulting shift in the city's culture.

Brooklyn Park Demographics

Population:	~80,000 (6th largest city in MN)
Density:	2,906 people/mi^2
Race/Ethnicity:	White – 51% Black/African-American – 24% Asian – 15% Hispanic/Latino – 6% Two or More Races – 3%
Immigration Data:	21% foreign-born Cultural groups include Liberian, Hmong, Somali, Vietnamese, Latino, and other immigrant groups
Average Income:	$54,196
Median Rent:	$871 (58% of renters suffer Housing Cost Burden)
Median Age:	32.7 years

Key Stages

Conversation

The community should be involved in engagement work before planning even begins. Brooklyn Park hosted Community Cafés across the city at community gathering spaces (such as houses of worship and apartment buildings) to hear the hopes and concerns of residents, then let this guide the initial stages of the Community Engagement Initiative.

Formation

Careful consideration should be given to the initial development of an engagement initiative. The community's input from the "conversation" phase should be taken into account when envisioning and goal-setting, and a diverse and representative team of residents, like Brooklyn Park's Core Planning Team, must be recruited to guide the formation.

Implementation

Implementation of community engagement work should be highly tailored to the community being engaged. What works for one community will not necessarily work for another, so listening to community members in the "conversation" and "formation" stages, and receptivity to feedback in the "evaluation" phase, are crucial.

Evaluation

Evaluation, with involvement from the community, should be iterative and utilize both quantitative and qualitative data. Residents should be involved in the process beyond just the contribution of data, and should assist with collection and interpretation. Regular evaluation allows a program to react nimbly to community feedback.

Integration

The most sustainable community engagement is that which becomes embedded in the function of a community. The long-term goal of a community engagement initiative should be for engagement to be second nature to residents and city government alike. Community engagement should eventually not be restricted to one program or one department.

Findings

Planning Process

- The Core Planning Team's diversity was crucial. Because city staff and residents were involved in the planning in roughly equal numbers, and represented different major stakeholders in the Brooklyn Park community, a variety of key issues were addressed.
- Direct outreach to particular groups and individuals ensured that underrepresented groups were included in the process from the start.
- The consensus model used required greater time commitment, but resulted in greater buy-in from participants.
- Facilitation by an outside group was beneficial to the planning process.

Volunteer Support

- Participants often faced difficulties balancing the time commitment of volunteering with their other commitments.
- The city would benefit from a more organized and consistent system for engaging and mobilizing volunteers for programs and events, and could consider hiring a volunteer coordinator to reduce burden on other staff.

Resident Empowerment

- Participants feel as if they have a voice in City Hall, and feel more comfortable engaging in city business as a resident outside of CEI as well.
- Enthusiasm for the initiative has been at its strongest, participants said, when residents were driving its direction and programming.
- When transitioning from direct programming to integration across departments, find ways for residents to continue to lead.

Culture Change

- A major positive result of the CEI was a shift within city government toward a culture of engagement, one in which community engagement became a part of every program rather than a separate activity.
- Staff and elected officials are more accessible to residents.

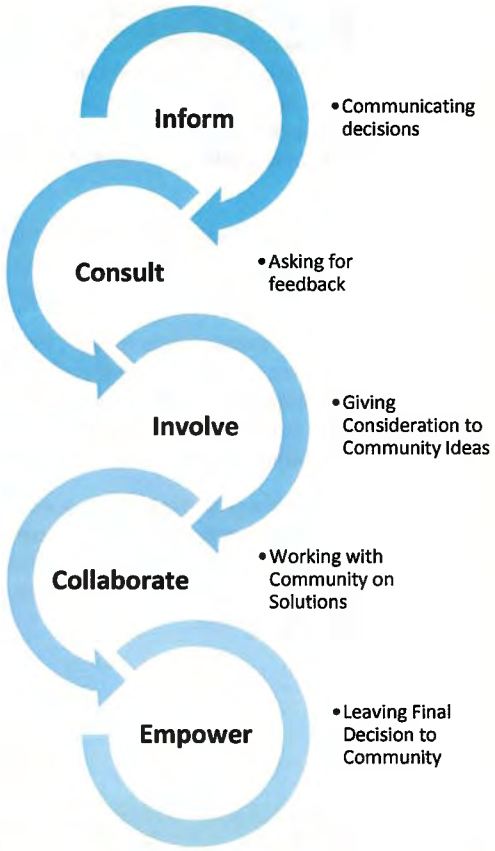
Diversity and Equity

- Residents noted that as result of CEI they were able to get to know the diverse cultural communities of Brooklyn Park, thanks to the early and sustained focus on diversity in initiative planning and implementation.
- In addition to increased familiarity, residents reported feeling more connected to community members that are different from themselves, and more willing to listen to new ideas and collaborate.

Brooklyn Park CEI Participants at a celebration recognizing their work.

Spectrum of Participation

Adapted from IAP2 Public Participation Spectrum



Successes

Brooklyn Park Pride – Residents are prouder to tell others that they live in Brooklyn Park and feel more invested in the city's future.

Empowered Community Members – Participants feel comfortable in City Hall and feel like they can make a difference in the city.

Leadership Development – Residents received training and had access to new opportunities.

New Partnerships – Partnerships formed brought people and organizations together.

New and Deepened Relationships – Participants made friends and professional connections.

Engagement Embedded in City Culture – Community Engagement became part of how the city of Brooklyn Park functions.

Community Programs and Events – Community created new programs and events.

Celebrating Diversity – Residents got to know and work more closely with the unique cultural communities in Brooklyn Park.

Evaluation of this initiative was made possible through a partnership between the City of Brooklyn Park and the Resilient Communities Project, part of the University of Minnesota's Center for Urban and Regional Affairs. For the full report visit http://rcp.umn.edu/.

Community Engagement Initiative

Accomplishments

Brooklyn Park

Background

In December of 2009, Brooklyn Park began a five-year Community Engagement Initiative (CEI), bringing together community members, volunteers, and city staff to change the way that the City engages with residents.

After holding a series of Community Cafés to learn from the community about the issues that are important to them, a core planning team was formed to set a direction for the new initiative. This team of residents, community leaders, and city staff created the strategic goals and structure that guided the initiative, and the mission statement and core values that continue to guide the city.

From 2010 to 2015, the youth, diversity, resources, and measurement teams, along with the core planning team, worked tirelessly to plan, implement, and evaluate strategies for meaningfully engaging and empowering Brooklyn Park residents.

Today the Community Engagement Division is an established part of city government, and departments across the city utilize community engagement in their planning and decision-making. CEI has had a lasting impact in Brooklyn Park through the events, organizations, and partnerships it began, and through the resulting shift in the city's culture.

Themes

Renewed Brooklyn Park Pride – Residents are prouder to tell others that they live in Brooklyn Park and feel more invested in the city's future.

Empowered Community Members – Participants feel comfortable in City Hall and feel like they can make a difference in the city.

Leadership Development – Residents received training and had access to new opportunities.

New Partnerships – Partnerships formed brought people and organizations together.

New and Deepened Relationships – Participants made friends and professional connections.

Engagement Embedded in City Culture – Community Engagement became part of how the city of Brooklyn Park functions.

Community Programs and Events – Community created new programs and events.

Celebrating Diversity – Residents got to know and work more closely with the unique cultural communities in Brooklyn Park.

"We have to stop doing things to people and start doing things with people."

- Mayor Steve Lampi

Participation

Volunteers	Hundreds
Team Members	~80 at a time
Events Sponsored (2015)	62
Event Attendees (2015)	3,847
New Neighbors Welcomed	Over 5,300
Neighborhoods Named	31

Notable Accomplishments

A small sample of achievements to come out of CEI:

Goals Met
- 91% feel proud to live in Brooklyn Park.
- 92% feel it is a thriving community
- 91% feel they have opportunity to succeed

Events
- Diversity Fest
- Youth in Government Day
- Citywide Garage Sales

Programs
- Brooklyn Bridge Alliance for Youth
- Neighborhoods Formation
- New Connect

Honors
- Featured at 2013 Transforming Local Government national conference
- Invited to attend national Community Engagement Leadership Institute in 2012

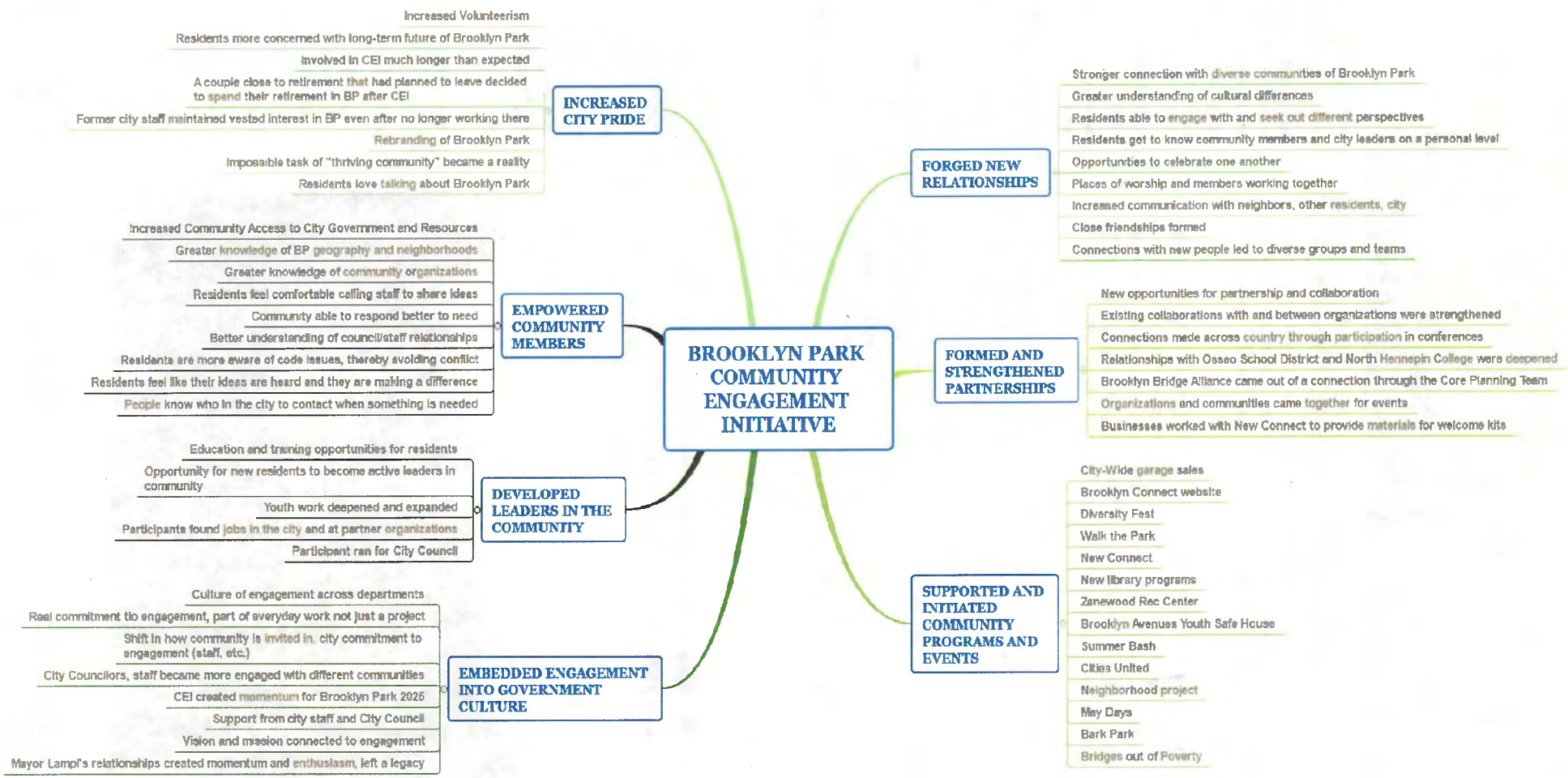
Evaluation of this initiative was made possible through a partnership between the City of Brooklyn Park and the Resilient Communities Project, part of the University of Minnesota's Center for Urban and Regional Affairs. For the full report visit http://rcp.umn.edu/.

Impact Map

Ripple Effect Mapping

Ripple Effect Mapping is an evaluation method that utilizes a combination of participant self-interview and collective discussion to create a visualization of the "ripples" of impact that extend outward from the immediate effects. Participants interview each other in pairs about successes, challenges, and unexpected results of a program, then as a group map out the relationships between the ideas that arose during their interviews. The participatory nature of the evaluation allows for the collective building up of themes and the tracing of chains of events that may have resulted from a program.

A Ripple Effect Mapping session was conducted with 38 CEI participants, volunteers, and team members. The following is a condensed version of the resulting map:



WWW.NEXUSCP.ORG/NCEI

Contact: Avi Viswanathan, aviswanathan@nexuscp.org or Angie Brown, abrown@nexuscp.org

IMPACTS OF COMMUNITY ENGAGEMENT MODEL

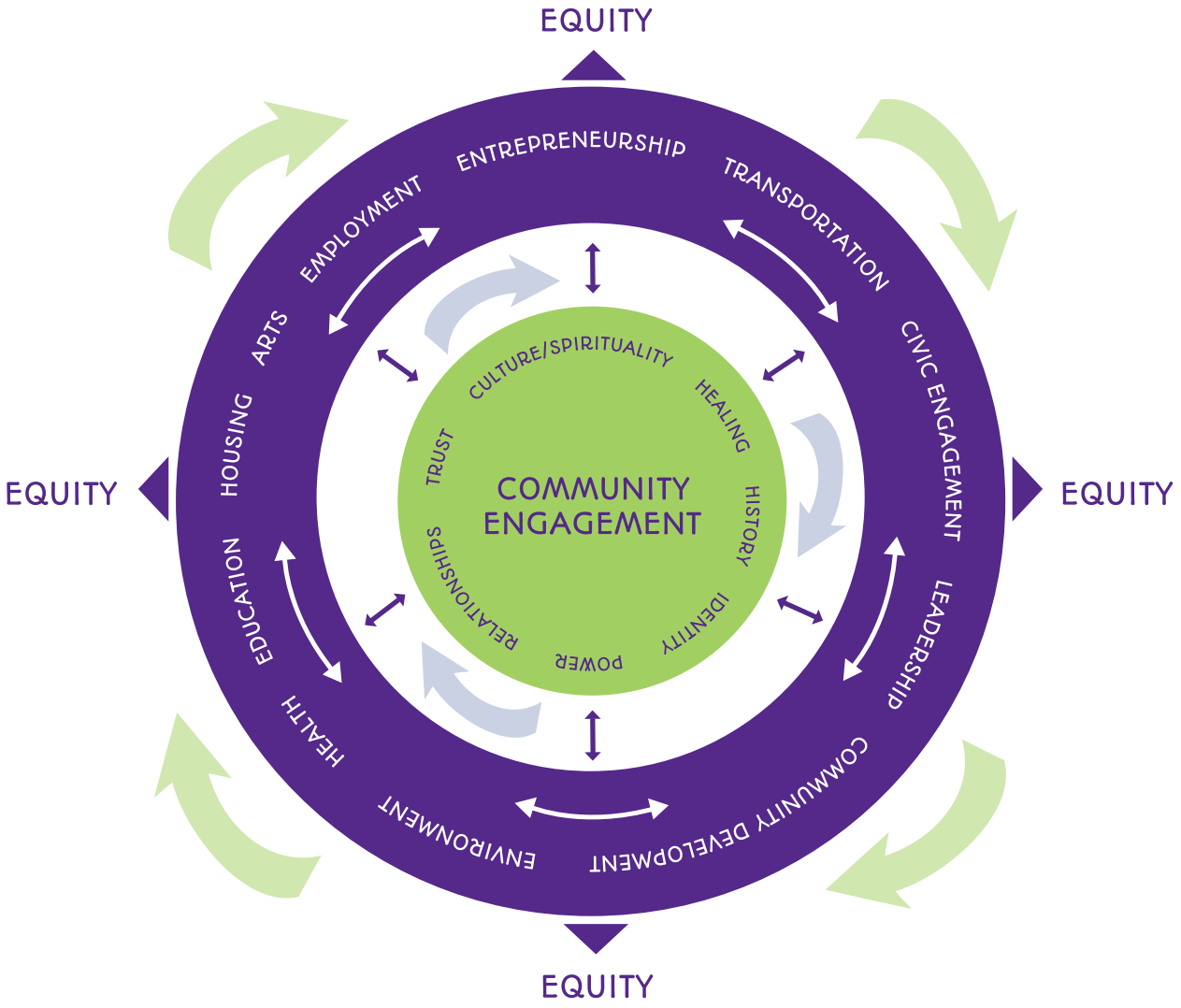
We encourage you to share your feedback with us and tell us how you are using the tool or resource. Nexus Community Engagement Institute and our partners intend these documents and tools to introduce practitioners, funders, evaluators, and community members to community engagement and to give the field clarity in its language and principles. However, community engagement is not a field that can rely on written materials alone; it takes a community of practitioners to support one another in practicing community engagement effectively, meeting its challenges, and tapping the strengths within each unique context. We encourage you to seek out experienced practitioners to support you in implementing these tools, principles, and concepts.

Nexus Community Engagement Institute is available for consultation. Please contact us at www.nexuscp.org/ncei or email program director Avi Viswanathan at aviswanathan@nexuscp.org.

Nexus Community Engagement Institute is continuing the work of the Building the Field of Community Engagement (BTF) collaborative. The BTF collaborative was a partnership between Casa de Esperanza, the Cultural Wellness Center, Hope Community, Lyndale Neighborhood Association, the Native American Community Development Institute, and Nexus Community Partners.

IMPACTS OF COMMUNITY ENGAGEMENT MODEL

As of May 29, 2018



The Impacts of Community Engagement model describes the outcomes that result from authentic community engagement.

The outer circle components are the tangible, visible goals of the work that community members do together.

The inner circle components are achieved in the process of doing the work and are foundational elements of a healthy community in their own right. These assets are the building blocks for positive change in all of the areas of the outer circle and need to be attended to and will be strengthened in a long-term process, during and beyond the process of achieving an outcome in the outer circle. The importance of these elements is often overlooked and communities' work in these areas is often under-resourced, but is vital in achieving equity.

The wheel as a whole is fluid and dynamic, demonstrating the perpetual interconnectedness of the elements. The model demonstrates the power of community engagement to impact multiple levels and systems, and to create sustained change that lasts beyond a project or campaign. This sustained systems change will impact all elements of an organization, institution, or system, including culture, structures, policies, rules, programs, staffing, and the allocation of resources.

COMMUNITY ENGAGEMENT DEFINITIONS

As of May 29, 2018

Community members and the Building the Field of Community Engagement partners (see cover) developed the following working definitions to describe the elements of the model. Coming to a collective understanding about what these terms mean and how to center them when engaging community will help build the field of community engagement and advance equity.

EQUITY: Fair access to resources and opportunities, full participation in the life and well-being of the community, and self-determination in meeting fundamental needs.

COMMUNITY ENGAGEMENT: A process that includes multiple techniques to promote the participation of residents in community life, especially those who are excluded and isolated, by engaging them in collective action to create a healthy community.

INNER CIRCLE DEFINITIONS: *Outcomes that are strengthened as a result of community engagement and are an essential part of the process.*

CULTURE/SPIRITUALITY
Community engagement nurtures the practices, beliefs, traditions, and ways of knowing that create cohesion and give people a vision across generations.

HEALING
Community engagement provides the space to draw meaning from a personal or collective story, and to recognize and build on strengths and resilience. It acknowledges and promotes wholeness.

HISTORY
Community engagement is a dialogue between the past, the present, and the future; acknowledging and learning from key events, sorrows, dreams, movements, influencers, victories and aspirations that have shaped how a community expresses its own culture and interacts with people and systems. Community engagement provides a path to healing and building from that history.

IDENTITY
Community engagement supports the maintenance, development, and/or reclamation of a healthy sense of self for individuals and includes a sense of belonging to groups that gives a person connection, continuity, and meaning.

POWER
Community engagement activates and exercises the ability to act for personal and community benefit.

RELATIONSHIPS
The practice of community engagement requires the building of authentic, long-term relationships involving truth, respect, and reciprocity.

TRUST
The practice of community engagement calls for transparency, honesty, and mutual learning and understanding between individuals, groups, organizations, and institutions. It requires being vulnerable and open to deepen relationships and strengthen mutual accountability.